







CITY DOCUMENTS

OF THE

CITY OF LOWELL

MASSACHUSETTS

FOR THE

YEAR 1917-1918



LOWELL, MASS.

BUCKLAND PRINTING CO.  72-74 MIDDLE STREET

1919

EXTRACT FROM THE ORDINANCES OF LOWELL

CHAPTER VIII—CITY DOCUMENTS.

Section 5. All City Documents (except the Rules and Regulations for the Government of the Police and Fire Departments) shall be printed in pamphlet form of the size of the Annual Report of the School Committee.

Section 6. All City Documents shall be bound together in one volume, under the direction of the City Clerk, and three or more copies shall be placed in the City Library, and one copy in the library of the Middlesex Mechanics' Association, one copy shall be sent to each City of the Commonwealth, to the library of the Harvard College, the Public Library of Boston, the State Library, the Smithsonian Institute at Washington, and the Old Residents' Historical Association of Lowell.

CONTENTS

1. Ninety-second Annual Report of the School Committee of Lowell, together with Fifty-fourth Annual Report of Superintendent of Schools, 1917.
2. Auditor's Eight-Second Annual Report of the Receipts and Expenditures of the City of Lowell, also General Information for the financial year ending December 31, 1917.
3. Sixth Annual Report of the Commissioner of Water Works, and the Reports of the Superintendent of Water Works and the City Engineer, for the year ending December 31, 1917.
4. Reports of the Births, Marriages and Deaths, 1917.
5. Report of the Board of Health, 1917.

6. Sixth Annual Report of Fire Commissioner, 1917.
7. Park Commissioner Fifteenth Annual Report, ending December 31, 1917.
8. Reports of the Trustees of the City Library for 1917.
9. Report of the City Solicitor for the year ending December 1917.
10. List of Jurors for the year 1918.

Ninety-Second Annual Report
OF THE
School Committee
OF THE
CITY OF LOWELL
AND THE
Fifty-Fourth Annual Report
OF THE
Superintendent of Public Schools
1917



Lowell, Massachusetts
Butterfield Printing Company
1918

CITY OF LOWELL

Office of the School Committee,

Lowell, Mass., April 30, 1918.

At a meeting of the School Committee, held on this date, it was voted to adopt the report of the Superintendent of Schools for 1917 as the report of the School Committee for that year and to authorize the printing of the report.

In accordance with this vote the report is herewith submitted.

HUGH J. MOLLOY,
Secretary.

ORGANIZATION
OF THE
School Committee
1917

JOHN H. LAMBERT, M. D., Chairman.
HUGH J. MOLLOY, Secretary.

MEMBERS

	Term Expires
WOLFRED P. CAISSE, Jr. 773 Merrimack St.	1917
JULIAN B. KEYES 102 Third St.	1918
JOHN H. LAMBERT, M. D. 70 Wannalancit St.	1918
JOHN C. LEGGAT 640 Broadway.	1918
RICHARD BRABROOK WALSH 419 Andover St.	1917

REGULAR MEETINGS OF THE SCHOOL COMMITTEE

January 30	May 29	September 25
February 27	June 26	October 30
March 27	July 31	November 27
April 24	August 28	December 25

ADMINISTRATION**Superintendent of Public Schools**

HUGH J. MOLLOY

Office in City Hall

Office Hours—One hour after the forenoon session of the schools,
at other times, including Saturdays, by appointment.

Clerk

FANNIE A. THOMPSON

Supervisor of Primary Grades

ALICE T. LEE

Office Hours—Mondays, Wednesdays and Fridays, 3.45 to 4.45 p. m.
at the office of the Superintendent of Schools.

Supervisor of Janitors

WILLIAM F. THORNTON

Office City Hall, Third Floor

Office Hours—12 m. to 1 p. m.

Supply Agent

HENRY L. WILLIAMS

Office in School Supply Room, City Hall.

Clerk

FRED JOHNSTON

•Hours—7.45 a. m. to 5 p. m.

Clerk in Attendance Office

MARY V. MALONEY

Attendance Officers

William F. Thornton, Camille Roussin, Henry L. Williams, John J. Walker.

Office—Third Floor of City Hall

Office Hours:

9 to 4 o'clock daily except Saturday; Saturday 9 to 10 o'clock.

ORGANIZATION

OF THE

School Committee

1918

JOHN H. LAMBERT, M. D., *Chairman
 RICHARD BRABROOK WALSH
 (Elected Chairman Jan. 28.)

MEMBERS

	Term Expires
HUGH J. MOLLOY, Secretary.	
JULIAN B. KEYES 102 Third St.	1918
JOHN H. LAMBERT, M. D. 70 Wannalancit St.	1918
**JOHN C. LEGGAT 640 Broadway.	1918
WILLIAM R. THOMPSON, D. M. D. 68 Grove St.	1919
RICHARD BRABROOK WALSH 223 Parkview Ave.	1919

REGULAR MEETINGS OF THE SCHOOL COMMITTEE

January 29	May 28	September 24
February 26	June 25	October 29
March 26	July 30	November 26
April 30	August 27	December 31

*Resigned Chairmanship to enter active military service January 28.

**In military service in France.

ADMINISTRATION**Superintendent of Public Schools****HUGH J. MOLLOY**

Office in City Hall

Office Hours—One hour after the forenoon session of the schools;
at other times, including Saturdays, by appointment.

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Office—Third Floor of City Hall

Office Hours:

9 to 4 o'clock daily except Saturday; Saturday 9 to 10 o'clock.

REPORT OF THE Superintendent of Schools

Office of the Superintendent of Schools,

1918.

To the School Committee of Lowell:

The following report, for the year 1917, is respectfully submitted.

SUMMARY OF STATISTICS

Valuation of City	\$ 90,639,651.50
Valuation of school property	2,250,000.00
Rate of taxation (\$23.40 per \$1000.)	
Expenditures for Day Schools	459,814.38
Expenditures for Evening Schools	16,742.47
Day School expenditures to total valuation .....	.507 per cent.
Day and Evening School expenditures to total valuation .....	.525 per cent.
Population by census of 1915	107,978
Number of polls	28,210
Number of public day schools	62
One high, thirteen grammar, thirty-two primary, two mixed, fourteen kindergarten.	
Number of school buildings	51
Occupied by public schools, 49; occupied by Vocational Schools, 2.	
Elected teachers, Dec. 31: on leave, 7; in service, 345; total, 352.	
Permanent substitutes	8
Subdivisions of Elected Teachers in service	
High, 16 men, 39 women; Grammar, 9 men, 146 women; Primary, 98 women; Mixed, 4 women; Kindergarten, 24 women; Drawing, 2 women; Music, 1 man, 1 woman; Sewing, 2 women; Manual Training, 2 men; Supervisor of Primary Grades, 1 woman.	
Teachers in Evening Schools, counting principals, term of 1916-17	70
Pupils enrolled in Evening Schools, term of 1916-17	2,614
High, 1,174, Elementary, 1,440.	

Whole number of pupils enrolled in Day Schools, 1916-17	13,602
High, 1,791; Grammar, 6,527; Primary, 4,475.	
Mixed, 146; Kindergarten, 663.	
Average number belonging to Day Schools, 1916-17	11,682
High, 1,609; Grammar, 5,802; Primary, 3,725;	
Mixed, 139; Kindergarten, 407.	
Average Attendance, 1916-17	10,778
High, 1,540; Grammar, 5,406; Primary, 3,386;	
Mixed, 127; Kindergarten, 319.	
Average per cent. of attendance, 1916-17	
High, 95.7; Grammar, 93.2; Primary, 90.9; Mixed,	
92.8; Kindergarten, 78.4.	
Average membership for year ending December, 1917	11,908
High, 1,524; Grammar, 5,824; Primary, 3,984;	
Mixed, 145; Kindergarten, 431.	
Number of school rooms in actual use in June, 1917	309
High, 50; Grammar, 142; Primary, 98; Mixed, 4;	
Kindergarten, 15.	
Number of school rooms in actual use in December, 1917	314
High, 51; Grammar, 145; Primary, 99; Mixed, 4;	
Kindergarten, 15.	
Average number to each room for year ending June, 1917	
High, 32.18; Grammar, 40.85; Primary, 38; Mixed,	
32; Kindergarten, 27.	
Average number to each room for year ending December,	
1917	
High, 29.88; Grammar, 40.16; Primary, 40.24;	
Mixed, 36.25; Kindergarten, 28.73.	
*Average cost of each pupil for tuition only, based in	
average number belonging	\$26.97
High, 42.23; Grammar, 21.88; Primary and Mixed,	
21.27; Kindergarten, 35.42.	
Average cost per pupil, based on the average number be-	
longing, and on the total expenditures for tuition,	
janitor service, medical inspection, supervision, sup-	
plies, fuel, and all incidentals	\$38.61
*Not including training schools.	

VOCATIONAL SCHOOLS

Boys: Buildings, 1; rooms, 11; teachers, 11; pupils enrolled, 124; average number belonging, 98; average number attending, 90; per cent. of attendance, 91.8.

Girls: Buildings, 1; rooms, 7; teachers, 8; pupils enrolled, 81; average number belonging, 59; average number attending, 54; per cent. of attendance, 91.5.

RECEIPTS AND EXPENDITURES

Expenditures

Appropriated and Assessed in 1917	\$506,579.58
Amount Disbursed	517,357.33
Deficit	10,777.75

Teachers of Day Schools:

High School	\$ 64,364.02
Grammar Schools—Butler School	\$16,584.57
Colburn School	7,099.99
Edson School	9,699.34
Green School	10,438.05
Greenhalge School	9,669.85
Lincoln School	12,730.07
Moody School	10,041.95
Morey School	14,666.17
Pawtucket School	9,954.35
Riverside School	3,515.26
Varnum School	14,705.26
Washington School	8,343.74
	<hr/>
	\$127,448.72
Primary and Mixed Schools	79,374.72
Kindergartens	14,168.40
Special Teachers	7,746.50
Substitutes	4,216.75

Total paid for instruction in Day Schools	\$297,319.11
School Physicians, Dentist and School Nurses:	
School Physicians and Dentist	\$2,400.00
School Nurses and Assistant to Dentist	1,370.00
	<hr/>
	\$ 3,770.00
*State agreement on Training Schools	\$ 27,392.95
Janitors:	
Janitors of Day Schools	\$ 51,264.19
Evening Schools:	
Teachers, High and Elementary Schools	\$11,303.50
Janitors	1,726.00
	<hr/>
	\$ 13,029.50

*See page 28.

Cost of Supervision:

Superintendent of Schools	\$3,413.33	
Office Assistant	850.00	
Attendance Officers (four)	5,600.00	
Clerk in Attendance Office	385.49	
Assistant in Supply Room	939.00	
	<hr/>	\$ 11,187.82
Vocational School Teachers and Janitors		\$ 28,349.46
Total Salaries, Vocational Schools omitted		\$403,963.57
Total Salaries, Vocational Schools included		\$432,313.03
Expended for bills for the year 1917:		
Coal (Evening Schools, \$711.50)	\$27,493.89	
Wood	438.25	
Water (Evening Schools, \$50.00)	1,633.22	
Board of Truants	1,789.87	
Electricity (Evening Schools, \$1,555.89)	2,406.73	
Gas (Evening Schools, \$533.84)	2,013.08	
General Repairs	1,264.70	
Electrical Repairs	659.05	
Furniture	281.84	
Books (Evening Schools, \$616.14)	11,027.72	
Paper and Supplies	7,076.12	
Kindergartens	332.00	
Printing (Evening Schools, \$171.10)	2,357.74	
Manual Training	449.47	
Janitor Supplies	3,468.89	
Apparatus	230.55	
Dental Supplies	68.90	
Medical Supplies	123.93	
Cooking, Etc.	1,120.43	
Material for Sewing	771.71	
Autos	929.03	
Graduations (Evening Schools, \$67.00)	513.22	
Regiment	455.15	
Telephones	665.13	
Transportation (Evening Schools, \$7.50)	690.98	
Miscellaneous	455.00	
Appropriation Transfers	3,876.68	
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Total		\$ 72,593.28
Bills, Vocational School		\$ 12,451.02
Total of bills, Vocational School included		85,044.30
Salaries and bills, Vocational School omitted		476,556.85
Salaries and bills, Vocational School included		517,357.33

Analysis of Vocational School Expense

Salaries of Day Teachers	\$22,433.91	
Janitors of Day Schools	2,668.55	
Salaries of Evening School Teachers	2,623.50	
Janitors of Evening Schools	623.50	
		<hr/>
Total of Salaries	\$ 28,349.46	
Equipment and supplies	12,451.02	
		<hr/>
Total expenditures for Vocational School	\$ 40,800.48	
Expended by Public Property Department	\$ 39,336.63	

Receipts

The receipts by the general treasury on account of the school department during the year were as follows:

Tuition in public schools	\$ 9,313.85	
Sale of text-books and supplies and badges	31.51	
		<hr/>
		\$ 9,345.36
Vocational School Tuition	\$ 4,142.22	
Vocational School Earnings	123.74	
Reimbursement from State	12,098.24	
		<hr/>
		\$ 16,364.20
		<hr/>
		\$25,709.56

TEXT-BOOKS AND SUPPLIES

The following table shows the amount per pupil in each school for text-books and supplies:

	Pupils 1917	Cost 1917	Average 1917	Average 14 Years
High	1,524	\$6,439.68	421.00	3.98
Grammars:				
Butler	633	807.22	1.28	1.33
Colburn	327	537.13	1.64	1.52
Edson	393	689.11	1.83	1.24
Green	435	877.63	2.02	1.32
Greenhalge	379	566.23	1.49	1.92
Lincoln	572	704.25	1.23	1.41
Moody	393	529.26	1.34	1.18

	Pupils 1917	Cost 1917	Average 1917	Average 14 Years
Morey	674	1,072.10	1.59	1.39
Pawtucket	428	812.47	1.89	1.54
Riverside	165	208.01	1.26	1.58
Varnum	625	488.13	.72	1.58
Washington	343	654.46	1.88	.00
Total	5,367	\$7,937.00	1.47	1.40
Primaries:				
Agawam	51	44.86	.88	.46
Ames	127	155.44	1.22	.42
Billings Street	104	73.63	.70	.51
Cabot Street	173	136.45	.73	.50
Carter Street	99	76.73	.77	.50
Central Street	80	32.04	.40	.44
Charles Street	139	81.78	.58	.53
Colburn	170	157.58	.93	.47
Cross Street	111	65.83	.59	.56
Dover Street	139	107.28	.77	.48
Eliot	132	70.33	.53	.57
Franklin	115	116.41	1.01	.52
Grand Street	118	152.55	1.29	.74
Greenhalge	160	162.57	1.03	.49
Kirk Street	27	19.67	.73	.38
Lakeview Avenue	122	137.70	1.13	.00
Laura Lee	234	235.96	1.01	.57
London Street	117	135.37	1.15	.62
Lyon Street	91	76.36	.84	.78
Pawtucket	77	149.93	1.94	.54
Pine Street	131	196.25	1.49	.62
Pond Street	161	181.83	1.12	.43
Powell Street	97	102.95	1.06	.57
Riverside	94	88.83	.94	.48
Sycamore Street	66	52.27	.79	.50
Tenth Street	168	119.45	.71	.37
Washington	139	37.00	.26	.00
West Sixth Street	173	101.04	.58	.43
Weed Street	90	77.52	.86	.44
Worthen Street	114	129.71	1.13	.47
Middlesex Village	113	233.22	2.06	.87
Total	3,732	\$3,508.54	.94	.48
Kindergartens	400	332.00	.83	.92
Total for all Schools	11,023	\$18,217.22	1.65	1.30

RECEIPTS AND EXPENDITURES

(DISCUSSION)

The total amount expended by the School Committee for all purposes for the year 1917 was \$517,357.33; the corresponding sum for the year 1916 was \$459,161.72. The increase in expenditure was \$58,195.61, and it is proper that brief comment be made upon the chief items in that increase.

In the first place the salaries of nearly all school employees were increased: the maximum for women teachers in the high school was raised from \$1,000 to \$1,200, and the maximum for women teachers in the elementary schools was raised from \$800 to \$900; there were also increases in the salaries for Administration officers, special teachers and janitors.

The large items of increase are as follows: high school, \$6,101; grammar schools, \$10,888; primary schools and mixed schools, \$8,971; kindergartens, \$1,935; janitors, \$3,259; vocational schools, \$9,357; evening schools, \$3,363; bills, \$12,334.

The item of increase for vocational schools includes increases in salaries and increased cost of materials used by the school.

The large item of increase for bills is due to the high cost of fuel and the greatly increased cost of all kinds of materials used in the School Department.

The increase in expenditures for evening schools is due to the fact that at the opening of the evening school session in October of 1916 the number of sessions per week was cut down from four to three, making it necessary to have a longer evening school session during the year 1917 in order to make up the customary number of evenings.

It should be noted also that the receipts by the general treasury on account of the School Department for the year 1917 were \$25,709.56. Therefore the net expenditure by the School Committee was \$491,647.77.

There is a country-wide demand for better salaries in the teaching world; during the last few years there has been a marked improvement in school salaries in Lowell and, if the efficiency of the schools is to be kept up and capable teachers are

to be obtained and kept in the schools, it will be necessary for the city to pay as good salaries as are paid by other cities of the same class.

A consideration of the number of pupils per teacher in the Lowell schools and per capita cost for instruction in the high and elementary schools will show that the schools of the city are not maintained on an extravagant scale.

On page 7 in the Summary of Statistics, the valuation of the city is set down as \$90,639,651.50, a much smaller sum apparently than the valuation for the year 1916, which was \$94,414,073.

Using the city valuation for the year 1917 as a basis, the ratio of school expenditure to the valuation appears to have increased greatly.

But the City Treasury received from the State in taxes on "intangibles" \$155,142.42, and this sum, according to the Lowell rate of taxation, represents a valuation of \$6,634,200; from this it will be seen that the valuation of the city has increased very materially and is now \$97,273,851.50, showing a gain of nearly three million dollars over 1916.

SCHOOL CENSUS

Up to the year 1917 the census of school children was taken each year by the attendance officers and a number of school janitors.

This year, for the first time, in accordance with the law of 1916, the census was taken through the schools themselves and a card enrolment was begun of all children between five and sixteen years of age.

The results have been reasonably gratifying but have not been entirely satisfactory; we hope, however, to have the provisions of the laws carried out smoothly and thoroughly, and to have complete co-operation between the public and private schools. This co-operation is absolutely essential in a city where the private school membership is so large as it is in Lowell.

The following passages from the law of 1916, printed in the report for 1916, are of sufficient importance to warrant repeating them:

"The supervisory officers of all private schools in the Commonwealth shall, within thirty days after the enrollment or registration of any pupil of compulsory school age, report the name, age and residence of the pupil to the Superintendent of Schools of the city or town in which the pupil resides; and whenever the pupil withdraws from a private school, the supervisory officer thereof shall, within ten days, notify the Superintendent of Schools of the city or town in which the pupil resides."

"Whoever withholds information sought by a School Committee or its agents under the provisions of this section or makes a false statement relative thereto, shall be punished by a fine of not more than fifty dollars."

From the census of 1917 the following data were obtained:

	Males	Females	Total
(a) Five years of age or over and under seven	1,806	1,725	3,531
(b) Seven years of age or over and under fourteen	7,246	7,302	14,548
(c) Fourteen years of age or over and under sixteen	950	1,337	2,287
	<hr/> 10,002	<hr/> 10,364	<hr/> 20,366

These figures show very plainly the high ratio of children to population for the City of Lowell.

For the information of those who have the care of children and who are not always aware of the requirements of the law, it may not be amiss to call attention in this place to a few important matters.

Every minor between the ages of fourteen and twenty-one years must have some kind of educational certificate before he can be employed legally.

No child over fourteen and under sixteen years of age may be employed unless he can satisfy the educational requirements indicated by the completion of the fourth grade.

Many persons think that children fourteen years of age may be employed no matter how limited their schooling may be; but, when the limit was set at the age of fourteen years, it was the expectation of the State authorities that practically all children of 'normal ability who are properly cared for will have completed, or nearly completed, the course in the elementary schools.

It is, then, the duty of educational authorities to do everything in their power to protect children in the educational rights which the laws of the Commonwealth have sought to secure them.

SCHOOL HOUSES

HIGH SCHOOL.

In the report of last year it was possible to speak of progress which had been made in the project for a new or enlarged high school. The matter is now completely at a standstill and it is not likely that anything will be done in the immediate future, owing to the very unusual conditions under which we are living and the general unwillingness of the people to undertake any costly new work which can be deferred without serious injury to public interests.

The need of better and enlarged high school accommodations, however, is still very evident to all who are acquainted with the situation; the school membership, to be sure, has been reduced for a time on account of war conditions and the call of business and industry, but another day is coming when the value of educational advantages will be more fully realized than ever before and we must be ready to give our boys and girls the best possible educational facilities.

ELEMENTARY SCHOOLS

During the year the Pawtucket School was greatly enlarged and improved in many ways. The old building consisted of three stories and a basement, providing four class rooms on the first,

four on the second, and a large assembly-hall on the third floor; the class rooms were lighted on two sides, were heated by direct radiation, and had no modern means of ventilation.

The addition to the school consists of two stories and a basement, providing four class rooms on the first and four on the second floor and manual training and domestic science rooms with their necessary stock rooms and pantries in the basement; new toilets and a fan-room in the basement, large supply rooms on the first and second floors, and a teachers' room and an emergency room were also supplied. The new class rooms are lighted on one side only, are heated by steam and ventilated by a fan system run by a gas engine. Two of the rooms on the second floor have been designed for use as fresh-air rooms.

At the same time much work was done in renovating and improving the old building, itemized as follows: new and complete toilet fixtures, sinks and drinking fountains, new sewer and new water main from the street, electric lighting, master clock and room clocks, telephone service for all rooms, old gas piping tested and improved, ventilating system with necessary changes in the building to accommodate it, four sets of fire doors in the corridors, old boiler-room deepened, old boiler re-located and two new boilers added, new boiler chimney, underground concrete coal-pocket with a capacity of two hundred tons built in the yard, metal weather-strips for windows and outer doors, fire alarm and bell system, and many changes to meet the requirements of state laws.

The addition to and improvements in this building have met a long-felt need in the Pawtucket district and that section of the city is now provided with a commodious and attractive school building.

In September the extension of the Bartlett Training school building was begun; the work is progressing satisfactorily and it is confidently hoped that the addition will be ready for occupancy by September of 1918. When it is completed, Lowell will possess one of the finest elementary school buildings in the state, thoroughly modern in every particular. The building has been

designed with a view to its use as a training school, the arrangement of the classrooms having this in mind. A kitchen with all conveniences has been installed and an open air room with an opportunity for an out-of-door class has been placed on the third floor and roof. On the ground floor there is a classroom, and a recreation room for special classes, a room specially designed for indoor garden work, shower baths, and modern toilets. All the dressing rooms have been arranged to open directly into the classrooms rather than into the corridors, this being one of the unique features of the building. In every way the building will be suited to the purpose for which it was constructed.

Attention must be called again to the crowded condition in the Morey, Washington, and Lincoln schools. Classes have been maintained during the year in the halls of the Morey and Washington schools, and the statement of this fact should be enough to convince the people of the Highland district of the city that something should be done in the near future to provide adequate school accommodations in that growing district.

Attention is called again to the large number of small school buildings in the system; fewer, larger, and more modern buildings would make for greater efficiency and economy in school maintenance and administration.

RESIGNATIONS, ELECTIONS, AND RETIREMENTS

The following lists give the changes in the roll of teachers due to elections, resignations, and retirements:

Resigned

Mabel E. Brown,	Charles W. Morey School
Carl D. Burt,	High School
Walter F. Connolly,	Vocational School
Eva Craven,	Laura Lee Kindergarten
Lena A. Gookin,	Green School
Mrs. Martina McMahon Higgins,	Moody School
Mrs. E. Laura Moore Mertrand,	Greenhalge School

Mrs. Catherine Jantzen O'Connor,	Butler School
Eleanor Rivet,	Asst. to Principal, Evening High
Bertha M. Sherburne,	Bartlett School
Albert H. Turner,	Vocational School
Mrs. Irene B. White Stewart,	Weed Street Kindergarten

Elected

Herbert D. Bixby,	Head-Master, High School
Katherine F. Baker,	Elementary
Paul D. Blanchard, M. D.,	Medical Director, High School
Albert W. Chilson,	High
Doris Childs,	Kindergarten
Katherine M. Crowley,	Kindergarten Principal
Marietta M. Dwyer,	School Nurse
Henry H. Harris,	Principal, Evening High
Ruth F. Hathaway,	Elementary
Gertrude A. Hession,	Elementary
Charles J. Hunt,	Schoolhouse Janitor
Peter J. Hunt,	Schoolhouse Janitor
Elizabeth Irish,	High
Major Walter R. Jeyes,	Military Instructor, H. S.
Jane T. Johnston,	Elementary
Arthur Lundwall,	Manual Training
Mary V. Maloney,	Clerk, Attendance Office
Helen L. Mansfield,	Elementary
John D. McKinley,	High
Alberta M. McQuesten,	Elementary
Charlotte M. Murkland,	Principal, Bartlett School
Katherine C. O'Neill,	Elementary
Percy W. Price,	Vocational
E. Helena Rivet,	Asst. to Principal, Eve. High
Leon Roundy,	Vocational
Esther A. Sanders,	Elementary
Evelyn L. Staples,	Kindergarten
Sadie A. Taff,	Elementary
Albert H. Turner,	Vocational
Ruth Upton,	Vocational
Mary F. Wallace,	Elementary

In Memoriam

Cyrus W. Irish

Head-Master of the High School

Marion S. Keyes

Teacher in West Sixth Street School

Grace Balch

Teacher in Varnum School

Michael H. Walsh

Schoolhouse Janitor

PUPILS BY GRADES

The following table shows the number of pupils in the schools, according to grades:

	Males	Females	Total
Kindergartens	220	228	448
Grade 1	784	741	1,525
" 2	699	658	1,357
" 3	633	567	1,200
" 4	696	626	1,322
" 5	621	584	1,205
" 6	538	525	1,063
" 7	452	473	925
" 8	310	435	745
" 9	291	300	591
" 10	224	280	504
" 11	174	228	402
" 12	156	169	325
" 13	122	152	274
" 14	10	8	18
Total	5,930	5,974	11,904

HIGH SCHOOL

The high school graduated a class of 319 in June and there was an entering class of 567 in September. Of this class 369 were from public schools, 106 from private schools, 61 from towns which have certificate privileges, 11 entered by examination, and 20 came from out-of-town schools.

The grammar schools sent 75 per cent. of their graduates to the high school; the average age of the entering class was fourteen years, four months.

The graduation exercises were held in Keith's Theatre on June 27th; the names of the Carney Medal students, and the names of the students who were awarded honorable mention are here given:

CARNEY MEDALS

Etheldred Adelaide Willmott
Helen Thissell
Hazel Julia Palmer

Lester Ames Sherburne
Donald Fiske Cameron
William Joseph Johnson

HONORABLE MENTION FOR SCHOLARSHIP

Marian Ethelyn Garland
 Allen Gerson
 Arnold White Milliken
 Marion Murningham
 Donald Shepley Cheney
 Viola Helen Howker

William Charles Ready
 Mildred Frances Colloty
 John Clarence Farrington
 Elsie Ruth Richter
 Elliott Burgess Roberts
 Mary Alice Dunn

HONORABLE MENTION FOR ATTENDANCE

Theresa Catherine Marie Downing
 Doris Gertrude Fox
 Helene Barnes Howarth
 Viola Helen Howker
 Bertha Ellen Jackson
 Harold Frederick Clark
 Roland Everard Falls

Nellie Agnes Murphy
 Hazel Julia Palmer
 Madeline Kempton Pinkham
 Ardelle May Plaisted
 William Charles Ready
 Francis Robert Whalen
 Whitcomb Wadleigh Wright

HARVARD SCHOLARSHIPS AWARDED BY THE
LOWELL HARVARD CLUB

Garabed Nazar Mousheghian
 Carroll Frederick Sullivan

MEDICAL AND DENTAL SUPERVISION

The health of the children in the public schools is supervised by nine physicians and two nurses, under the control of the School Committee; four physicians are employed by the Board of Health to supervise the private schools and their names and the names of the schools which they supervise are given below:

- Dr. F. P. Murphy**—Immaculate Conception, St. Peter's School and Orphan Asylum, Sacred Heart and St. Stanislaus.
Dr. R. C. Stewart—Our Lady of Lourdes, Notre Dame Academy, St. Louis, St. Patrick's for Boys and St. Patrick's for Girls.
Dr. H. W. Jewett—Greek Orthodox, St. Michael's, St. Mary's, Mrs. Paxon's Private School.
Dr. R. Mignault—St. Joseph's for Boys, St. Joseph's for Girls, St. Joseph's (Pawtucketville), and St. Joseph's Kindergarten.

There is also a school dental room in the Worthen street school, located on Worthen street between Market street and Broadway, which is now in its fifth year of operation. This room is open on all school days, including days when the storm

signal is sounded, from 9 to 12 o'clock in the forenoon; appointments are made by the school physicians, nurses, and teachers and are under the supervision of Miss Lantagne, the dentist's assistant. The following summary of work done during the year was given.

Number of children receiving treatment	1,171
Number of teeth filled	851
Number of teeth treated	224
Number of teeth extracted	1,550
Number of toothaches treated	82
Number of children having teeth cleaned	576

There is a growing and almost country-wide interest in public health matters and much is expected of the schools along this line. Indeed it is not unreasonable to expect that the nation, the state, and the city will in the near future decide that where so much money is expended upon the school training and mental development a little more might well be spent to improve and safeguard the physical well-being of the future men and women of the country; the disclosures made by the physical examination in connection with the draft law make argument unnecessary.

The School Committee of Lowell have shown initiative from the beginning in medical supervision, school dental work and school nursing and, while it is doubtless true that more could be done with more hands to do it, we should appraise justly and fairly all that has been done.

Two nurses are not physically able to give adequate attention to the children of our large school department; and, when we take into consideration the very large number of children in the private schools of the city, it can be seen that we should have three or four times as many nurses if we wish to do even reasonable justice to interests of such great importance.

Considering the number of persons employed and the expense to the city, our work in medical supervision and school nursing will compare most favorably with the standard established for those activities in any other school departments. The physicians and nurses have given time and interest and effort to their work with the children entirely out of proportion to the expense

of the work, and we have been remarkably free from epidemics and serious sickness in the schools.

From the beginning the nurses employed by the School Committee have been under the supervision of the paid head of the Lowell Guild and that organization has exercised a valuable, interested and monitorial guidance of the work.

Carefully tabulated reports have been sent to the school office each month and at the end of each year. From a type-written report of four pages for the year ending December 31, 1917, some of the most important items are selected and submitted for the purpose of giving some idea of the extent of the work:

Schools visited	1,249
Pupils inspected (new)	16,177
Pupils inspected (old)	8,614

DEFECTS FOUND

Defective Teeth	5,803
Pediculosis and Nits	1,191
Enlarged Tonsils	1,352
Impetigo	121
Organic Heart Trouble	101

TREATMENTS

Treatments in Schools	647
Tonsils and Adenoids (Hospital)	37
Tonsils and Adenoids (Private)	11
Consultations with Teachers and Pupils	5,068
Dental Clinic (new)	762
Dental Clinic (old)	192
Private Dentist	222
Home Visits (new)	378
Home Visits (old)	118
Hygiene Talks	191
Glasses obtained	24
Tooth Brush Drills	79
First Aid in School	69

SIGHT AND HEARING TESTS

	Pupils Examined	Defective Sight	Per Cent Defective	Defective Hearing	Per Cent Defective	Parents Notified
High	1,645	166	10	33	2	193
Grammar	5,912	772	13	152	2.5	707
Primary	4,209	287	7	66	1.5	292
Total	11,766	1,225	10.4	251	2.1	1,192

SCHOOL SAVINGS BANKS

School Savings Banks have been in operation in the Lowell schools for about ten years and they have accomplished a great and useful work. The results for the past year are very interesting and encouraging, particularly if we consider the many and various demands for money which have been made during the year. Moreover, a large sum of money, made up of very small contributions, was raised for the Children of America's Army of Relief and very creditable amounts of money, material, and work were given to the American Red Cross and the Junior Red Cross Societies.

Many of the accounts which are started by children while they are in school are continued after they leave school; the total of the deposits in the Central Savings Bank and the Lowell Five Cent Savings Bank on December 31, 1912, was \$27,089.76 and the total on December 31, 1917, was \$62,805.25.

A statement showing the amounts reported by the banks for the years 1916 and 1917 is presented:

SCHOOL	Deposits Dec. 31, 1916	Deposits Dec. 31, 1917
Bartlett	\$ 4,349.27	\$ 5,416.36
Butler	3,856.24	4,639.17
Colburn	1,783.66	2,318.40
Edson	2,011.55	2,615.59
Green	3,596.21	3,276.62
Greenhalge	4,038.73	4,709.94
Lincoln	5,953.17	7,759.46
Moody	4,698.81	5,094.56
Charles W. Morey	7,580.87	9,013.36
Pawtucket	5,831.36	7,322.58
Riverside	1,265.11	1,600.02
Varnum	5,790.29	6,291.51
Washington	2,246.91	2,747.68
Total	\$53,002.18	\$62,805.25

MANUAL TRAINING AND COOKING

During the year two fine rooms for cooking and manual training were set off and equipped in the basement of the Greenhalge school and similar rooms were provided in the addition to the Pawtucket school.

The rooms in the Greenhalge school furnish ample accommodations for the boys and girls of that school and of the Varum school as well.

There are now only three schools which are without cooking and manual training facilities and it is the intention of the School Committee to provide for them as soon as possible.

The instruction in manual training is given by high school teachers and two special teachers; the instruction in cooking is given by elementary teachers who have had special preparation for the work.

Every elementary school has in its corps of teachers one or more women who can take charge of the work in cooking with admirable results and it can be said with assurance that the employment of regular teachers at some slight advance over schedule salary will lead to better results in the work in domestic science than will the employment of special teachers, not to mention the very great economy of the plan.

VOCATIONAL SCHOOL

The seventh year of the school opened with an enrolment of 119 boys and 68 girls. The only requirement for admission to the day classes of the Vocational School, so far as age is concerned, is that a pupil must not be less than fourteen and not more than twenty-five years of age.

All pupils must be residents of the state; for pupils who do not reside in Lowell there is a tuition charge of \$100, payable by the city or town of the non-resident pupil, as the school is absolutely free to the individual pupil, regardless of his place of residence.

The work is so arranged that a boy may enter at any time and may advance as rapidly as his industry and ability will allow.

The school offers preliminary training for boys as carpenters, electricians, cabinet-makers, machinists, and automobile repairers.

The boys are trained mostly on productive work in all departments and the work is of such a practical nature that they fit naturally into the industry in advanced apprenticeship standing.

Besides the shop work the boys are given English, arithmetic, civics and citizenship, and hygiene.

A course of practical science is given to the boys in the electrical, machine and auto repair classes.

The school for girls is organized for the training of girls for the activities and duties of everyday life; there are courses in housekeeping, dressmaking and work with power-machines.

In February, 1916, the girls' school opened the dining-rooms at the State Normal School and since then has served dinners and luncheons to the faculty and students of the school. This gives a valuable training in preparing food in large quantities and also in serving; the practice proved to be so valuable it seemed wise to make it a permanent part of the curriculum.

The school sent out a class of nineteen graduates on June 26, 1917.

The State Board of Education exercises a considerable control over the school, as the state has agreed to pay half of the maintenance expense of the school; in order to secure reimbursement from the state, the courses of study, equipment, buildings, and the work of the teachers must be approved by the agents of the Board of Education.

During the school year ending June, 1917, thirty-seven boys were placed at the trade for which they had been trained; of these twelve were pupils from the automobile department, five from the cabinet-making and carpentry department, five from the electrical department and sixteen from the machine department.

TEACHERS' EXAMINATION

An examination of candidates for third-grade certificates, such certificates qualifying the holders to teach in the primary and grammar grades, was held on Saturday, June 23, 1917.

By the rules of the School Committee notices of this examination is given in May, and the examination is open to none but graduates of colleges or normal schools who have had at least two years of successful experience as teachers in day schools.

This examination was prepared and the papers of the candidates were read and marked by the Worcester school department. Eight candidates were selected by means of this examination; they were elected to serve as permanent substitutes in the elementary schools and their names are as follows: Ellen T. Muldoon, Alice F. Morrill, Hazel A. Gardner, Mary G. Dudley, Gertrude Weinbeck, Celia B. Wood, Margery E. McMaster and Mary F. Concannon.

TRAINING SCHOOLS

By an agreement made by the State Board of Education and the Lowell School Committee the bulk of the money required for the maintenance of those public schools which are used for practice purposes by the Lowell Normal School is contributed by the city. This money is paid into the state treasury in quarterly payments and the computation on which the amount is based is here given:

Total expenditure by the School Committee ..	\$517,357.33
Deduct as follows:	
Vocational School	\$40,800.48
High School, Tuition	64,364.02
High School, Janitors	7,200.00
High School Bills	14,168.05
Medical and dental supplies	192.83
Dentist, Assistant, Physicians, Nurses	3,770.00
Attendance Officers	4,385.49
Evening school tuition	11,303.50
Evening school janitors	1,726.00
Evening school bills	3,712.97
Repairing furniture	3,378.99
General repairs	1,264.70
Electrical repairs	640.50
	<hr/>
	\$156,907.53

Cost of maintenance for State agreement computation	\$260,236.47
Average membership in elementary schools, 1917	10,384
Grammar, 5,824; Primary, 4,129; Kindergarten, 410.	
Average membership in training schools, 1917	885
Bartlett grammar, 457; Bartlett primary, 210; Bartlett kindergarten, 31; New Moody, 155; Lexington Ave., 32	
\$360,236.47 divided by 10,384 equals \$34.69, cost per pupil.	
\$34.69 multiplied by 885 equals \$30,700.65, amount due the State for 1918.	

SCHOOL AND HOME GARDENS

For the last few years, under the supervision of Miss Lee, a very commendable interest has been taken in school and home gardens and very considerable results have been accomplished. During this entire year great emphasis was laid on the importance and necessity of supplementing the normal and ordinary food supply by the produce from home gardens and the labor and interest of children.

Garden clubs were formed in all schools in which the teachers and children were in sympathy with the work; these clubs had their president, secretary and inspector and records were kept of the work of the members.

Space can not be given in this brief report for a full statement of what was achieved, but I shall mention one or two items from a more comprehensive report: One group of twelve boys who had home gardens reported a harvest worth \$108.; the garden of the children of the Tenth Street primary school produced crops worth \$178.

Numerous persons and organizations outside the school department made valuable contributions to the success of the enterprise.

While the direction and supervision of home gardens are not strictly public school activities, the schools have taken a great interest in them, and the material and disciplinary values to be derived from a full and adequate promotion and supervision of the work are so great that some proper provision should be made for the direction of a work which has great possibilities.

EVENING SCHOOLS

Service in the evening schools is now limited to those who are teachers by profession; the only exception made is in the case of an insufficient number of day school teachers who desire to do evening work.

So far as the character of the work in evening schools is concerned they differ in no respect from day schools.

Attendance at the high school is purely voluntary; the courses in the school are designed for boys and girls who have been unable to attend day high school and for those also who have attended or have completed the course in day high school and wish to continue their studies. The courses in the commercial department are especially strong and efficient and compare most favorably with any day school courses.

The elementary schools are provided for those who are compelled by law to attend evening school and also for those who have left school before the completion of their grammar school course. The falling-off in immigration and the arrival of many at adult age have lessened greatly the number of those who are obliged to attend school. Lack of interest on the part of parents and an almost complete lack of appreciation of the opportunities offered to children of very limited schooling keep the number of children who voluntarily attend evening school ridiculously low. Children of very limited education who lack the ambition and interest to accept educational advantages in well-appointed evening schools, taught by regular day school teachers, should be compelled by law to attend evening school until their eighteenth or twentieth year.

The generally listless attitude toward evening schools indicates a failure to comprehend the importance of developing and protecting vast resources, human resources, the youth from fourteen to twenty years.

NATURALIZATION CLASS

The school department has continued the plan of offering a course of lessons for those who are preparing for naturalization. This work is entirely outside the scope of the prescribed work

of the schools, but the feeling is growing that it is a legitimate school activity and that teachers can make a valuable contribution along this line. A list of the lessons, all but two of which have been prepared by men in the schools, and the names of the contributors are given:

History of the United States	Mr. Bixby
President, Cabinet, Congress, Courts and Election	Mr. Dennett
Law-making for the Nation	Mr. Harris
Constitution of the United States	Congressman Rogers
History of Massachusetts	Mr. Greene
Governor, Legislature, Council, Courts	Mr. Barry
Law-making for the State	Mr. Whitcomb
Constitution of Massachusetts	Mr. Mellen
County, Town and City	Mr. Perkins
Primary Elections	Mr. Callahan
Elections, State, County and Municipal	Mr. King
Duties and Privileges of Citizenship	Mr. Irish
Becoming a Citizen	Hon. Dennis J. Murphy
Geography of the United States and of Massachusetts	Mr. Barr

SCHEDULE OF SCHOOL SESSIONS AND VACATIONS

High School:—8.25 A. M. to 1.25 P. M.
 Elementary Schools:—8.30 A. M. to 11.30 A. M. and 1.45 P. M. to 3.45 P. M.
 Middlesex Village:—9 A. M. to 12 M. and 1.30 P. M. to 3.30 P. M.
 New Moody Street:—8.45 A. M. to 11.45 A. M. and 1.45 P. M. to 3.45 P. M.
 Lexington Avenue:—8.45 A. M. to 11.45 A. M. and 1 P. M. to 3 P. M.
 Vocational School, Boys':—8.30 A. M. to 12 M. and 12.30 P. M. to 3.30 P. M.
 Vocational School, Girls':—8.30 A. M. to 12.30 P. M. and 1 P. M. to 3.30 P. M.
 Evening High School: 7 to 9.
 Evening Vocational Schools: 7.15 to 9.15.
 Evening Elementary Schools: 7 to 9.

VACATIONS

Summer Vacation—from the Wednesday preceding the last Friday in June to the second Monday in September.
 The week which includes Christmas.
 The week beginning with the ninth Monday and the week beginning with the eighteenth Monday after the Christmas vacation.
 Hours for ringing the no-school signal:—7.30 A. M., 12.45 P. M., and 6 P. M.

SUMMARY OF EVENING SCHOOL ATTENDANCE
For Term 1916-1917

SCHOOLS	Number of Rooms in Each School	Teachers at Beginning of Term	Teachers at Close of Term	Evenings Taught	Whole Number on Registers			Average Number Belonging			Average Attendance			Per Cent. of Attendance	Minors Unable to Read and Write in English		
					Males	Females	Total	Males	Females	Total	Males	Females	Total		Males	Females	Total
High	33	33	33	68	601	573	1174	332	356	688	264	302	566	82			
Cabot Street	3	2	3	63		111	111		78	78		66	66	85		80	80
Colburn	6	7	7	63	128	77	205	75	42	117	54	42	96	82	24	15	39
Edson	6	6	6	63	88	75	163	48	44	92	40	38	78	86	42	34	76
Green	12	12	15	63	357	313	670	175	225	400	151	215	366	92			
Greenhalge	6	6	5	63	96	54	150	45	36	81	36	31	67	83	16	19	35
Mann	4	4	3	63	141		141	55		55	43		43	78	33		33
Totals	70	70	72		1203	1411	2614	730	781	1511	588	694	1282	85%	115	148	263

REPORT OF THE ATTENDANCE OFFICERS FOR THE YEAR 1917

	Total Number Cases Investigated	Absentees	Truants	Wandering About the Streets	Visited Second Time	Visited Third Time	Violating the Rules of School	Arrested	Sent to the Middlesex County Training School	Placed on Probation	Prosecution of Parents	Employment Cert. Issued 14 to 16 yrs.	Educational Cert. Issued 16 to 21 yrs. Literate	Educational Cert. Issued 16 to 21 yrs. Illiterate
January.....	395	359	36	53	37	9	0	0	0	0	0	204	469	46
February.....	262	224	38	53	25	6	0	3	1	2	0	171	424	72
March.....	363	327	36	47	27	4	0	0	0	0	0	252	541	42
April.....	340	291	49	54	34	6	0	3	3	0	0	243	636	54
May.....	380	310	70	64	32	4	0	1	1	0	0	337	618	91
June.....	212	186	26	48	19	3	0	0	0	0	0	792	518	93
July.....												427	731	68
August.....												241	528	72
September.....	260	229	31	52	21	1	0	0	0	0	0	655	761	99
October.....	333	279	54	64	29	6	0	6	2	4	0	288	603	78
November.....	380	329	51	56	37	5	0	4	2	2	0	346	684	57
December.....	209	182	27	43	13	1	0	0	0	0	0	225	519	42
Totals.....	3134	2716	418	534	274	46	0	17	9	8	0	4181	7032	814

Employment Certificates Issued	4181
Literate Educational Certificates Issued	7032
Illiterate Educational Certificates Issued	814
Temporary Certificates Issued	32
Vacation Certificates Issued	232
Home Cards Issued	3
Total	12294

CONCLUSION

The year has been a most momentous one for the nation, the state, and the city, and its close finds the people of the country engrossed with peace and war activities of the greatest magnitude; the contribution to the national welfare which has come from the great system of free common schools in the United States soon is to be appreciated at its true value, for it has been a contribution of fundamental importance.

The experience of France and the British Empire has taught those nations, just as our own experience has taught and will continue to teach us, that the money and talent and interest devoted to moral, mental and physical training through popular education are a most necessary as well as a most wise investment, and, even in the face of the vast expenditures which must be made for the purposes of war, it will become clearer than ever before to us that there must be a redoubling of our efforts to keep the work of our schools up to the highest possible standards.

The schools of America have played and are playing a great part in the prosecution of this war; they must play a great part in the re-adjustments which are to follow and they must continue their work, as they alone can do it, in behalf of democracy and enlightened popular government.

Carry on and support and improve the schools.

Respectfully submitted,

HUGH J. MOLLOY,
Superintendent.

Roll of Teachers

Giving name, subjects or grade taught and residence

HIGH SCHOOL

Kirk and Anne Streets

High School Employment Bureau Only

Herbert D. Bixby, Head-Master	19	Rutland St.	\$3,000
Frederick R. Woodward, Sub-Master and Head of Dept. Mathematics, 168 Sixth St.	2,400		
Fred Albinson, Bookkeeping	8	Newbury St.	1,200
Jennie L. Allen, Physics	947	Middlesex St.	1,200
Alice H. Bacheller, Commercial Law, Com, Arithmetic ..	21	Huntington St.	1,200
Adelaide Baker, Head of Department of French	136	Myrtle St.	1,200
Orton E. Beach, Stenography	858	Chelmsford St.	1,200
Enma L. Bradley, French	485	Westford St.	1,200
Elmer G. Brennon, Geometry and Algebra	97	Georgia Ave.	1,500
*C. Fred Campbell, Manual Training	89	Georgia Ave.	
Marietta Cassidy, Latin	4	Fifth Ave.	1,200
M. Mabel Cassidy, French and Latin	44	B St.	900
Albert W. Chilson, Manual Training	Y.	M. C. A.	1,000
Ethel V. Cleaves, Physical Instructor	30	Hanks St.	900
Alice L. Cluin, Latin, Algebra, and English	130	Fort Hill Ave.	800
James F. Conway, Chemistry	115	Nesmith St.	1,700
Grace D. Donovan, History and English	256	Branch St.	1,000
Ruth L. Eaton, Com. Law, Com. Arith., Bookkeeping, Typewriting, 59 Pine St.	800		
Esther Elliott, Algebra and Latin	25	Fairview St.	700
Edith C. Erskine, History, English, and German	138	Mt. Vernon St.	800
Ethel M. Everett, Algebra, History, and English	539	Westford St.	1,200
Bertha W. Ferguson, Bookkeeping	100	Myrtle St.	1,100
Florence R. Foote, History, English, and French	28	Wannalancit St.	1,000
Grace M. Goodhue, History and Latin	120	School St.	1,200
Peter J. Gulesian, Manual Training	18	Wildwood St., Chelmsford	1,400
Bessie E. Huntoon, French, Botany, and Physiology ..	64	Warwick St.	1,200
Elizabeth Irish, English and Algebra	11	Willow St.	650
Mary C. Joyce, Elocution	82	Eleventh St.	900
Mary H. Killpartrick, History, English, and Com. Geography, 27 Maryland Ave.	1,200		
Genieve E. Lawrence, Algebra, English, Com. Geography ..	53	Berkeley Ave.	800
Frances R. H. Leggat, Physical Instructor	640	Broadway	650
Annabelle C. Lowney, Stenography and Typewriting ..	86	Sherman St.	800
Albert D. Mack, Head of Commercial Department ..	17	Summit St.	2,000
Queenie A. Manchester, Assistant to Principal	66	Willow St.	550
Mary L. Martin, Latin, English and History	39	Durant St.	900
Frances U. Masterson, English	352	Christian St.	900
H. Estelle Moors, English, Algebra, Com. Geography ..	104	Moore St.	700
Elizabeth H. Murphy, French, Com. Law, Com. Arith.	159	White St.	1,200
John D. McKinley, German and Latin	474	Beacon St.	900
Loretta A. McManmon, English and Algebra	Dracut,	Mass.	700
Ellen E. McQuade, German, History, and English ..	318	Andover St.	800
Joseph G. Pyne, Greek, History, and English	823	Central St.	1,300
Mary E. Quirbach, Algebra and English	50	Highland St.	800
Alice Richardson, Algebra and Geometry	213	Branch St.	1,200
Gertrude A. Rodliff, English		Chelmsford Centre ..	1,200
Jesse D. Sallee, Head of English Department	46	Rhodora St.	1,600
Ruth L. Sawyer, English and Algebra	169	Fairmount St.	650
Charles E. Seede, Manual Training	88	Warwick St.	1,600
Millie A. Severance, Physics	302	Stevens St.	900
James A. Shanley, Bookkeeping	364	Lawrence St.	1,500
Margaret V. Spear, French	576	Westford St.	1,200
Mary G. Stevens, History and English	126	Fort Hill Ave.	1,200
Alice O. Stickney, Astron., Geol., Latin, English, Roman History, 599 School St.	1,000		
Violet Stocks, College Mathematics, and Geometry	141	Parkview Ave.	900

Marie R. Sullivan, Office Training, Stenography, Bookkeeping, 42 Forrest St.	1,000
Edward J. Thompson, Spanish	Chelmsford Centre ... 1,200
Susie L. D. Watson, American History, and Geometry ..	390 E. Merrimack St. 1,200
*Nathan Pulsifer, M. D., Medical Director	473 Beacon St.
Paul D. Blanchard, M. D., Medical Director	255 Foster St. 200
*Major Colby T. Kittredge, Military Instructor	48 South Walker St. .
Major Walter R. Jeyes, Military Instructor	67 Gates St. 500

Janitors

Michael J. Lynch	29 Second Ave.
*Herbert R. Baker	9 Shedd St.
Arthur H. Dana	73 Fletcher St.
Michael H. Finnegan, Temporary	141 Fayette St.
William Mack	37 May St.
Bernard H. Maguire	55 Grave St.
John J. Moran	43 Anderson St.
Charles E. Thornton	236 Branch St.

*In Military Service

GRAMMAR SCHOOLS

BARTLETT SCHOOL

Wannalancit Street

(Normal Training School)

Charlotte M. Murkland, Principal	179 Pine St.	\$2,000
Sara E. Ames, gr. 9, 8, 7, History, Civics, and Sewing ..	418 Walker St.	1,150
Belle F. Batchelder, gr. 6	66 Arlington St.	1,050
Kathleen E. Driscoll, gr. 9, 8, 7, Geog. and Drawing ..	47 Grace St.	900
Katherine F. Farley, gr. 5	Lowell, R. F. D. No. 3	1,050
E. Belle Perham, gr. 4	100 Riverside St.	1,050
Belle A. Prescott, gr. 9, 8, 7	68 Mt. Washington St.	1,150
Maria W. Roberts, gr. 5 and 4	571 Westford St.	1,050
Charles E. Seede, gr. 9, 8, 7, Manual Training	88 Warwick St.	450
M. Beatrice Shea, gr. 9, 8, 7, Office and Penmanship ..	267 Walker St.	750
Celia Standish, gr. 9, 8, 7, Composition, and Music ..	96 Grove St.	900
A. Gertrude Stiles, gr. 6 and 5	21 Wyman St.	1,050
Alice D. Sunbury, gr. 9, 8, 7, Gram., Domestic Science	573 Westford St.	1,150
Amy L. Tucke, gr. 9, 8, 7, Algebra, Arith., and Music	111 Butterfield St. ..	1,150

Janitors

William J. Hunt	3 Fourth St.
Thomas F. Hannafin	15 Sargent St.

BUTLER SCHOOL

Gorham Street

Cornelius F. Callahan, Master	31 Georgia Ave.	\$2,200
Delia T. Brady, gr. 7	183 Chapel St.	900
Helen L. Clark, gr. 6	230 High St.	800
Marguerite J. Cronin, Literature, Geography, Algebra		
Drawing, and Music	228 Plain St.	900
Mary E. Crowley, gr. 5	903 Gorham St.	900
Mary L. Crowley, gr. 6	201 Appleton St.	900
Annie J. Devine, gr. 7, 6, 5	151 Carlisle St.	900
Peter J. Gulesian, Manual Training	18 Wildwood St., Chelmsford	400
*Margaret G. Hyde, gr. 4	900 Central St.	900
Katherine E. Kelley, gr. 7	434 Fletcher St.	900
Mary E. Lane, Arithmetic, Domestic Science, History,		
Science, History, and Drawing	14 Ellsworth St.	900
Mary L. McSorley, gr. 5	40 Huntington St.	900
Nellie F. Murphy, Grammar, Music, and Drawing ..	85 Sherman St.	900
Alice C. O'Brien, gr. 7, 6, 5	300 Wilder St.	900
*Mary G. Quinn, gr. 4	28 Chapel St.	900
Sadie E. Tully, History, Geography, Music, Drawing ..	105 Westford St.	900

ROLL OF TEACHERS

37

**Katherine M. Usher, gr. 4	465 Parker St.	900
*Room in Carter St. School.		
*Room in Weed St. School.		

Janitors

Terrence F. Casey	163 Howard St.
Thomas M. Keegan	22 Ellsworth St.

COLBURN SCHOOL

Lawrence Street, near Charles

Helen M. Shean, Prin.	260 High St.	\$1,200
Anna J. Cawley, gr. 8	85 Rogers St.	650
Lena Collins, gr. 7	1106 Mammoth Rd.	750
Sadie A. Connor, gr. 4	73 Pleasant St.	750
Elizabeth A. Conway, gr. 5	219 Church St.	750
Caroline A. Downey, gr. 5	56 Huntington St.	650
Julia M. Driscoll, gr. 6	47 Grace St.	750
Margaret C. Fox, gr. 9	8 Eddy St.	900
Louise C. Thomas, gr. 4	85 Eleventh St.	750

Janitor

Michael Finnegan (On Leave of Absence)	235 Stackpole St.
Patrick J. Mahoney, (Temp. Assignment)	16 Lyon St.

EDSON SCHOOL

Highland Street

Leo A. King, Master (In Military Service)	4 Astor St.	\$1,600
Frances M. Webster, gr. 9, Acting Prin.	45 Varney St.	900
Susan F. Burbank, gr. 6	Chelmsford Centre	750
Anna E. Donovan, gr. 7	76 Madison St.	900
Marianna L. Donovan, gr. 5, Domestic Science	256 Branch St.	750
Kate J. Hayes, gr. 6	15 Floyd St.	900
Delia C. Maloney, gr. 4	70 Elm St.	900
Helen L. Mansfield, gr. 4	12 White St.	550
Margie F. Marren, gr. 7	86 Rolfe St.	900
Marietta E. O'Neil, gr. 8	11 Carter Ave.	650
Jennie E. Rogers, gr. 5	418 Walker St.	900

Janitors

John H. Condon	96 Midland St.
William P. Black	900 Central St.

GREEN SCHOOL

Merrimack Street

Paul L. Perkins, Master	248 Chelmsford St.	\$1,600
Hannah M. Barrows, gr. 8	19 Newhall St.	900
Agnes T. Courtney, gr. 5	11 Marsh St.	900
Carrie E. Erskine, Special	74 Fort Hill Ave.	900
Jennie E. Fay, gr. 6	115 Stackpole St.	900
Mary V. Johnson, gr. 4	183 Wilder St.	900
Jane T. Johnston, Special	184 Baldwin St.	500
Katherine F. McCarthy, gr. 5	647 Market St.	900
M. Alice McCue, gr. 6	536 Rogers St.	750
Lizzie A. Nolan, gr. 7	210 Pawtucket St.	900
Katherine C. O'Neil, Special	175 Walker St.	750

ROLL OF TEACHERS

Elizabeth Provencher, gr. 9	22 West Bowers St.	800
A. Lillian Walsh, gr. 4, Domestic Science	145 Mammoth Road	650

Janitors

Oscar W. Brown	Livingston Ave.
William S. McKenzie, Jr.	87 Gershom Ave.

GREENHALGE SCHOOL

Ennell Street, Centralville

Arthur K. Whitcomb, Master	2 Belmont St.	\$2,200
Mary Alice Cochrane, gr. 7	230 Cabot St.	750
Mary M. Cowell, gr. 7	22 London St.	650
Josephine S. Dunlavy, gr. 5	90 Gates St.	800
Grace E. Frye, gr. 8, Domestic Science	Billerica	750
Helen Kohawn, gr. 4	63 Thirteenth St.	900
Ellen F. Lynch, gr. 6	137 Riverside St.	750
Annie L. Mahoney, gr. 4	22 Burlington Ave.	900
Alice A. Masterson, gr. 5	35 Oak St.	900
Leona M. Small, gr. 6	46 Whitney Ave.	750
Mary E. Tobin, gr. 6	52 Highland St.	900

Janitors

John Barrett	19 Burnside St.
David E. Cornock	6 West Eleventh St.

ABRAHAM LINCOLN SCHOOL

Chelmsford Street

James L. Mellen, Master	74 Pentucket Ave.	\$2,200
Esther G. Donlon, gr. 7	756 Westford St.	900
Margaret T. Donovan, gr. 6	42 Claire St.	750
Mabel W. Ewings, gr. 5	3 Astor St.	900
Ellen L. Floyd, gr. 4	124 Stevens St.	900
Irma V. Hodgman, gr. 9	632 Westford St.	900
Margaret S. Jamieson, gr. 5	37 Viola St.	900
Margaret G. McDonald, gr. 6	397 Broadway	900
Elsie M. Puffer, gr. 4	942 Middlesex St.	900
Julia G. Slattery, gr. 6	122 Hoyt Ave.	750
Margaret M. Sparks, gr. 9	169 Fort Hill Ave.	900
Bride T. Sweeney, gr. 7	138 Pleasant St.	900
Sadie A. Taff, gr. 8	235 Stackpole St.	550
Gertrude Weinbeck, gr. 8, Substitute	192 Wentworth Ave.	

Janitors

Edward Cullen	9 Auburn St.
Timothy F. Rohan (Provisional Appoint.)	65 Claire St.

MOODY SCHOOL

High and Rogers Streets

William S. Greene, Master	302 Nesmith St.	\$2,200
Katherine F. Baker, gr. 8	665 Andover St.	750
Mary F. Carolan, gr. 7	256 Concord St.	650
Frances E. Garrity, gr. 5	74 Stevens St.	900
Frances E. Hardman, gr. 5	18 Astor St.	900
Fannie G. Hobbs, gr. 4	5 Astor St.	750
Mae Hogan, gr. 6	82 Varney St.	650
Cora E. Jones, gr. 4	66 Huntington St.	750
Frances C. Noonan, gr. 6	115 Pleasant St.	650
Flora A. Owen, gr. 7	42 Huntington St.	900
Ida L. Samuels, gr. 9	56 Fifth Ave.	900

Janitors

Dennis A. Harrington	495 High St.
John O'Connor	102 Pleasant St.

CHARLES W. MOREY SCHOOL

Pine and Wilder Streets

William W. Dennett, Master	55	Eighteenth St.	\$1,900
Ella M. Breene, gr. 6	17	Florence Ave.	900
Leonora K. Battles, gr. 8	21	Chester St.	900
Lillian E. Alistier, gr. 4	71	Wedge St.	750
Anna A. Burnham, gr. 7	14	Belmont St.	900
Anna T. Coffey, gr. 8	189	Wilder St.	750
Annie V. Donoghue, gr. 7 and 6	11	Wesley St.	900
Mary F. Foss, gr. 9, Domestic Science		Chelmsford Centre	900
Minnie C. Gray, gr. 6	106	Liberty St.	900
*Vera E. Groves, gr. 4	342	Stevens St.	750
C. Ethel Hale, gr. 7	15	Robbins St.	900
Charlotte A. Parsons, gr. 4	485	Westford St.	750
Grace R. Sanders, gr. 5	67	So. Loring St.	900
Grace Scribner, gr. 4	70	Tyler Park	900
Lulu Turner, gr. 5	33	Warwick St.	900
*Grace F. Ward, gr. 5	201	Appleton St.	900
Estelle L. Whitney, gr. 9	13	Oakland St.	900
*Room in the Franklin School			

Janitors

Elmer E. Harder	125	Dover St.
Harrison L. Morgan	28	Grand St.

PAWTUCKET SCHOOL

Mammoth Road, Pawtuckerville

William P. Barry, Master	1280	Middlesex St.	\$2,200
Delia F. Briscoe, gr. 8		Dracut, R. F. D. No. 3	750
Corinna G. Cover, gr. 4	16	Lombard St.	900
Clotilda A. Delaney, gr. 4	82	Colonial Ave.	750
Alice G. Donohoe, gr. 6 and 5	50	Linden St.	650
Goldie M. Gardner, gr. 5	15	Columbus Ave.	900
Loretta M. Kinsela, gr. 7 and 6	50	B St.	650
Alice H. Lynch, gr. 7	137	Riverside St.	650
Maigery E. McMaster, Ungraded Oven			
Air Room (Temporary Appointment)			
Anna L. McNabb, gr. 8 and 7	63	Dunfey St.	650
Julia B. Riordan, gr. 9, Domestic Science	27	Woodward Ave.	900
Charlotte C. Walsh, gr. 6	85	Eleventh St.	900

Janitors

James S. Somerset	104	Woodward Ave.
John Roarke	9	Sixth Ave.

RIVERSIDE SCHOOL

Woburn Street, Wigginville

Rosalie T. Burns, Prin., gr. 9 and 8	39	Whitehead Ave.	\$1,100
Elizabeth A. Gilinson, gr. 5	3	Bourne St.	750
Christine M. Kane, gr. 4	339	High St.	800
Harriet L. Wheeler, gr. 7 and 6	64	Morton St.	900

Janitor

John H. D. Toy	7	Nelson Ave.
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ROLL OF TEACHERS

VARNUM SCHOOL

Myrtle Street, Centralville

Henry H. Harris, Master	93	Eleventh St.	\$2,200
Florence E. Archibald, gr. 5	93	Vernon St.	750
Agnes Bailey, gr. 9	11	First St.	900
Ellen L. Daley, gr. 7	134	Lilley Ave.	650
Rose A. Dowd, gr. 6	127	Beacon St.	900
Agnes T. Fay, gr. 6	123	Third St.	900
Mary A. Fay, gr. 6	123	Third St.	900
Ruth F. Hathaway, gr. 4	106	Durant St.	550
Ada E. Hoole, gr. 4	101	Myrtle St.	900
Margaret F. Howe, gr. 5	208	South St.	900
Alice R. Keese, gr. 5	89	Georgia Ave.	900
Elizabeth C. Kennedy, gr. 9	223	Pine St.	900
Daisy B. MacBrayne, gr. 8	24	Beech St.	900
Mary R. Seery, gr. 7	127	Beacon St.	750
Grace M. Thurber, gr. 8	52	Fourth St.	750
Julia Williams, gr. 4	156	Sixth St.	900

Janitors

Adam McElroy	670	Bridge St.
John H. Nolan	117	Coburn St.

WASHINGTON SCHOOL

Lang Street, near Inland

John E. Barr, Master, Literature	178	First St.	\$2,100
Helen A. Dow, gr. 9, 8, 7, Grammar	149	B St.	900
Rose C. Geary, gr. 9, 8, 7, History	49	Whipple St.	650
Laura F. Greene, gr. 9, 8, 7, Arithmetic	179	Warwick St.	750
Susan C. Griffin, gr. 9, 8, 7, Geography	390	Wilder St.	900
Gertrude T. Keyes, gr. 6 and 5	62	Pine St.	650
Myrtle M. Killpartrick, gr. 4, Domestic Science	27	Maryland Ave.	750
Alice G. McGilley, gr. 6	75	Hoyt Ave.	750
Olive J. Palm, gr. 9, 8, 7, Composition, and Drawing	255	Plain St.	750
Esther A. Sanders, gr. 5 and 4	79	Methuen St.	650

Janitors

David H. Angluin	27	Crowley St.
Timothy Moynahan	38	Whipple St.

PRIMARY SCHOOLS

The grammar school to which each primary belongs is indicated in parenthesis.

AGAWAM STREET (Butler)

Agawam and Barrington Streets

Mary A. Fay, Prin., gr. 3 and 2	115	Stackpole St.	\$ 950
Anna M. Higgins, gr. 3, 2, 1		North Billerica	800

Janitor

John H. Hallett	17	London St.
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AMES STREET (Colburn)
Lawrence and Ames Streets

Rose E. MacVey, Prin., gr. 2	46	Linden St.	\$ 950
Julia C. O'Sullivan, gr. 1	105	Mt. Washington St.	650
Mary C. Timmons, gr. 3	196	Pawtucket St.	900

Janitor

John T. McCarthy	9	Puffer Ave.	
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BARTLETT
(In Bartlett School)

Hazel A. Gardner, gr. 4 and 3 (Temporary Assignment)	15	Columbus Ave.	
Eleanor J. LeLacheur, gr. 2	128	Fourth Ave.	\$ 900
Essie E. Roche, gr. 1	1835	Middlesex St.	1,050
Mary E. Snow, gr. 1	89	School St.	1,050
Mary F. Wallace, gr. 3 and 2	76	Walker St.	750

BILLINGS STREET (Varnum)

Annie M. Robbins, Prin., gr. 3 and 2	62	Twelfth St.	\$ 950
Elizabeth H. Seede, gr. 2 and 1	88	Warwick St.	900

Janitor

James Hounsell	704	Bridge St.	
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CABOT STREET (Green)

Mary T. Whelley, Prin., gr. 3	254	Parkview Ave.	\$ 950
Helen R. Halloran (Special)	546	E. Merrimack St.	650
Mary J. Murphy, gr. 1	34	Butterfield St.	900
Celia B. Wood (Substitute Teacher)	92	Fort Hill Ave.	

Janitors

Michael H. Finnegan	141	Fayette St.	
Thomas A. Green (Temporary)	512	Gorham St.	

CARTER STREET (Butler)

Isabella T. Vinall, Prin., gr. 3	1	Glidden Ave.	\$ 950
Katherine F. Brady, gr. 1	173	Chapel St.	900
Margaret J. Connors	48	Walnut St.	900
Henrietta I. Grady, gr. 2 (Temporary Assignment)	39	Lundberg St.	650

Janitor

Frederick D. Rolfe	15	Carter Ave.	
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CENTRAL STREET (Colburn)

Elizabeth G. Lawler, Prin., gr. 3, 2	260	High St.	\$ 950
Helen A. Drury, gr. 2 and 1	29	Princeton St.	900

Janitor

William P. Black	900	Central St.	
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ROLL OF TEACHERS

CHARLES STREET (Edson)

Alice T. Owens, Prin., gr. 3	4 Belmont St.	\$ 950
Ella E. Gardner, gr. 2 and 1	239 Stevens St.	900
Marietta G. Gormley, gr. 2	22 Lyon St.	900
Margaret A. Harrahan, gr. 1	114 Bellevue St.	900

Janitor

James F. Leary	249 E. Merrimack St.
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COLBURN (Colburn)

Charles Street, near Lawrence St.

Anna M. Courtney, Prin., gr. 3	196 Pawtucket St.	\$ 950
Elizabeth R. Connell, gr. 2 and 1	19 Fort Hill Ave.	650
Mary A. Hartley, Special	51 Pine St.	900
Gertrude B. McQuade, gr. 2	225 Summer St.	750
Katherine M. Tobin, gr. 1	52 Highland St.	750

Janitor

John Scott	23 Meadowcroft St.
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CROSS STREET (Bartlett)

Cross St., between Fletcher and Mt. Vernon Streets

Ida J. Clarke, Prin., gr. 3	17 Nicollet St.	\$ 950
Anna T. Coburn, gr. 2	39 Arlington St.	900
Katherine Kelley, gr. 1	434 Fletcher St.	900

Janitor

William Kennedy	73 Fletcher St.
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DOVER STREET (Morey)

Dover Street between Middlesex and Grove Streets

Clara B. Horne, Prin., gr. 3	106 Chestnut St.	\$ 950
Clementine H. Bowers, gr. 2	60 Loring St.	900
Bertha Gardner, gr. 1	32 Robbins St.	900

Janitor

Frank J. Burch	24 So. Canton St.
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ELIOT (Edson)

Favor and Summer Streets

Ellen A. Stillings, Prin., gr. 2 and 1 ..	24 Bellevue St.	\$ 950
Ellen A. Corbett, gr. 3	32 Highland St.	900
Lovola McCann, gr. 1	17 Wentworth Ave.	900
Nellie T. O'Grady, gr. 2	623 Central St.	900

Janitor

Charles J. McCabe	7 Oak St.
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FRANKLIN (Morey)

Branch and Middlesex Streets

Kate G. Jones, Prin., gr. 1	240	Jewett St.	\$ 950
Ethel H. Chalifoux, gr. 2	157	Mt. Vernon St.	650
Mary E. Richardson, gr. 3	55	Victoria St.	750

Janitor

Joseph Provost	54	Queen St.	
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GRAND STREET (Lincoln)

Marion E. Greene, Prin., gr. 3 and 2	96	Pine St.	\$ 950
Jennie M. Bennett, gr. 2	81	Gates St.	900
*Mary J. Moynahan, gr. 1	28	Windsor St.	750
*Room in Howard St. School			

Janitor

Matthew Ward	635	Broadway	
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GREENHALGE (In Greenhalge School)

Ruth Crowell, gr. 1	69	Fort Hill Ave.	\$ 750
Alice L. Joyce, gr. 2	82	Eleventh St.	650
Blanche E. Marshall, gr. 1	445	Merrimack St.	800
Martha Rogers, gr. 3	131	Cumberland Road	900

KIRK STREET (Green)

Kirk and Lee Streets

Eliza A. Davis, Prin., gr. 3, 2 and 1	BillERICA, P. O. Box 147	\$ 925
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Janitor

John J. Manchester	66	Willow St.	
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LAKEVIEW AVENUE (Greenhalge)

Lakeview Avenue

Margaret J. McCluskey, Prin., gr. 3	246	Methuen St.	\$ 950
Anna F. Joyce, gr. 1	82	Eleventh St.	900
Katherine P. O'Brien, gr. 2	28	West Adams St.	750

Janitor

Joseph F. Naphen	39	West St.	
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LAURA LEE (Washington)

Plain and Powell Streets

Flora H. Sprague, Prin., gr. 3	110	Branch St.	\$ 950
Sara M. Dean, gr. 1	107	Warwick St.	900
Emma M. Graham, gr. 1	419	Chelmsford St.	750
Lena M. Robinson, gr. 3 and 2	68	So. Walker St.	900
Lilla M. Stanley, gr. 2	2	Horn St.	900

Janitor

William J. Hunt	17	A St.	
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ROLL OF TEACHERS

LEXINGTON AVENUE (Bartlett)

Carrie M. Hart, Prin., gr. 1, 2, 3, 4 and 5. 16 Varney St.\$1,075

Janitor

John M. Hogan 196 Cross St.

John E. Hart (Provisional Appointment) .86 West St.

LONDON STREET (Butler)

London and West Streets

Elizabeth R. Maguire, Prin., gr. 3 53 Nesmith St.\$ 950

Margaret L. Haggerty, gr. 2 and 1 17 Bellevue St. 800

*Mary F. Hill, gr. 2 and 1 Chelmsford St., Chelmsford, Mass. . 900

*Room in W. London St. School

Janitor

Peter J. Hunt 49 Madison St.

LYON STREET (Butler)

Lyon and Central Streets

Kate F. Murphy, Prin., gr. 3 and 2 870 Gorham St.\$ 950

Gertrude A. Hession, gr. 2 and 1, Assistant (Temporary Assignment) 134 Pleasant St. 550

Mary J. McCarry, gr. 2 and 1 1600 Gorham St. 900

Janitor

Patrick J. Mahoney 16 Lyon St.

Harry Kelley, Temporary 162 Avon St.

MIDDLESEX VILLAGE (Morey)

Middlesex and Cornell Streets

Harriet F. Wakefield, Prin., gr. 6 and 5 .79 Stevens St.\$ 950

Gertrude E. Dane, gr. 2 and 1 225 Gibson St. 900

Mary J. Reardon, gr. 4 and 3 16 Marginal St. 650

Janitor

P. Henry Driscoll 16 Edwards St.

NEW MOODY STREET (Bartlett)

New Moody Street

Addie R. Merrill, Prin., gr. 3 465 Bridge St.\$1,200

Anna I. Cassidy, gr. 1 4 Fifth Ave. 1,050

Grace C. Delaney, gr. 2 82 Colonial Ave. 1,050

*Maude M. Hardy, gr. 1 Chelmsford, R. F. D. No. 1, Box IIa 1,050

*Room in Pawtucket School

Janitor

Thomas J. McGee 199 Mt. Hope St.

PAWTUCKET PRIMARY

(In Pawtucket School)

Eugenia A. Hogan, gr. 3	106	Avon St.	\$ 900
Alberta M. McQuesten, gr. 2	118	D St.	500

PINE STREET (Morey)

Pine and Gibson Streets

Carrie J. Bailey, Prin., gr. 3	56	Loring St.	950
Helen D. Swain, gr. 1	418	Walker St.	900
Grace I. Washburn, gr. 2	227	Westford St.	900

Janitor

Joseph M. Hunt	49	Madison St.	
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POND STREET (Moody)

Pond and High Streets, Belvidere

Adelaide Crowley, Prin., gr. 1	115	Fort Hill Ave.	\$ 950
*Maud E. Greene, gr. 1	238	E. Merrimack St.	900
Mary I. Halloran, gr. 2	546	E. Merrimack St.	800
**Alice E. Ramsay, gr. 3	124	Third St.	\$ 900
*Room in High St. School			
*Room in Moody School			

Janitor

Timothy F. Harrington	151	Andover St.	
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POWELL STREET (Morey)

Powell Street, near Liberty

Viola A. Hamblett, Prin., gr. 2 and 1	58	Bellevue St.	\$ 925
Ellen J. Piper, gr. 3 and 2	55	Norcross St.	900

Janitor

William Liddle	23	Ralph St.	
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RIVERSIDE

(In Riverside School)

Charlotte O. Lowe, gr. 2 and 1		North Chelmsford	\$ 750
Etta M. Smith, gr. 3 and 2	1118	Lawrence St.	900

SYCAMORE STREET (Moody)

Sycamore Street

Florence E. Rowell, Prin., gr. 3 and 2 ...	65	Huntington St.	\$ 925
Elizabeth B. Dame, gr. 2 and 1	178	First St.	900

Janitor

John J. Conway	338	Fairmount St.	
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ROLL OF TEACHERS

TENTH STREET (Varnum)

Cor. Tenth and Varnum Streets

Mary F. Beane, Prin., gr. 3	212 Tenth St.	\$ 950
Alice M. French, gr. 1	21 May St.	800
Alice A. Holtham, gr. 2 and 1	1107 Bridge St.	900
Fannie H. Murphy, gr. 2	42 Twelfth St.	900

Janitor

Winfield S. Cross	55 Seventh St.
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WASHINGTON

(In Washington School)

Carrie L. Brown, gr. 4 and 3	18 Bourne St.	\$ 750
Clara M. Everett, gr. 2 and 1	75 Beacon St.	900
Annie E. Irving, gr. 3 and 2	28 Walnut St.	800

WEED STREET (Butler)

Lilla M. McEvoy, Prin., gr. 3 and 2	210 Pawtucket St.	\$ 950
Mary F. Devine, gr. 1	1527 Gorham St.	900

Janitor

John N. Palm	369 Lawrence St.
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WEST SIXTH STREET (Varnum)

West Sixth Street, between Coburn and Jewett Streets, Centralville

Stella J. Allen, Prin., gr. 3	115 Third St.	\$ 950
Elizabeth F. Lamere, gr. 2	63 Canton St.	900
Mabel A. Metcalf, gr. 2 and 1	93 Vernon St.	800
Laura H. Palmer, gr. 1	78 Hildreth St.	900

Janitor

Patrick J. Clark	199 Pleasant St.
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WORTHEN STREET (Green)

Worthen Street, between Market and Broadway

Esther V. Green, Prin., gr. 2	434 Westford St.	\$ 950
Mary R. Marren, gr. 3	86 Rolfe St.	900
Mary E. Meehan, gr. 1	228 Worthen St.	900

Janitor

John J. Manchester	66 Willow St.
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KINDERGARTENS**AGAWAM STREET**

(In Agawam Street Primary)

Sarah G. Sparks, Prin.	59 Elm St.	\$ 700
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BARTLETT

(In Cross Street Primary)

Helen W. Noyes, Prin.	102 Butman Road	\$ 775
Alta S. Leary	22 Parkview Ave.	600

CENTRAL STREET

(In Central Street Primary)

Katherine C. Early, Prin.	256 E. Merrimack St.	\$ 700
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CHARLES STREET

(In Colburn Primary)

Mabel D. Nickerson, Prin.	125 Clark Road	\$ 700
S. Alice Knapp	305 E. Merrimack St.	650

DOVER STREET

(In Dover Street Primary)

Elizabeth A. Wilson, Prin.	15 South Canton St.	\$ 700
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FRANKLIN

(In Franklin Primary)

N. Grace Taylor, Prin.	11 Ware St.	\$ 700
Helen S. Livingston	39 Garden Road	650

HOWARD STREET

(In Howard Street Primary)

Gertrude A. Roberts, Prin.	Chelmsford, Mass., P. O. Box 61 ..	\$ 700
Hortense M. Lamere	13 Ralph St.	650

ROLL OF TEACHERS

LAKEVIEW AVENUE

(In Lakeview Avenue Primary)

Ella M. Penn, Prin.	31	Sanders Ave.	\$ 700
Celina L. Lalime	28	Flemings St.	550

LAURA LEE

(In Laura Lee Primary)

Katharine M. Crowley, Prin.	115	Fort Hill Ave.	\$ 700
Doris Childs	256	Gibson St.	500

MOODY

(In High Street Primary)

Marietta King, Prin.	205	Stackpole St.	\$ 700
Gertrude B. Crowley	115	Fort Hill Ave.	650

PAWTUCKET

Mammoth Road

Hortense Tabor, Prin.	82	Riverside St.	\$ 700
Abigail Bacon		Bedford, Mass.	550

PINE STREET

(In Pine Street Primary)

Louie I. Smith	19	Holden St.	\$ 700
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VARNUM

(In Varnum School)

Edith A. Howitt, Prin.	52	Myrtle St.	\$ 700
Marion Simpson	67	Methuen St.	550

WEED STREET

(In Weed Street Primary)

Alice F. Seeton, Prin.	159	Mammoth Road	\$ 700
Evelyn L. Staples	52	Princeton St.	500

VOCATIONAL SCHOOL

Mann School Building, Broadway

Principal

Thomas F. Fisher, Principal215 Foster St.\$2,500

Assistant to Principal

Clara I. Farrington182 Perry St. 650

Head of Machine Department

Charles R. BeaneChelmsford, Mass. 1,300

Teacher of Shop Science and Drafting

Maurice A. Butterfield12 June St. 1,250

Machine Shop Instructor in Automobile Department

George H. Dozois189 White St. 900

Head of Steam and Electrical Department

Chester W. MacDonald22 Bellevue St. 1,300

Instructor in Spinning and Carding

Percy W. Price68 Thirteenth St.

Instructor in Cabinet Making

Charles J. Rodgers65 Butterfield St. 950

Instructor in Stationary Engineering

Leon RoundyNo. Billerica, Mass. 1,450

Instructor in General and Related Subjects

James F. Peebles218 Pawtucket St. 1,200

Instructor in General Machine Shop Practice

Charles J. Welsh77 Billings St. 900

Head of Automobile Repairing

Ernest O. Wheeler41 So. Walker St. 1,300

Head of Woodworking Department

Fred F. Wiggin617 Chelmsford St. 1,300

Janitor

George Daley98 Walker St.

GIRLS' DEPARTMENT

Morril School Building ,Common Street

Department Head

Esther M. Downing434 Westford St.\$1,100

Head Teacher of Housekeeping Department

Ruberta M. Bramhall84 Tenth St. 950

Teacher of Dressmaking

Agnes R. Burns427 Lakeview Ave. 750

Related Subjects

Anna T. McCarron228 High St. 850

Teacher of Dressmaking and Millinery

Mary H. Mehan40 Sixth St. 750

ROLL OF TEACHERS

Head Teacher of Dressmaking

Anna M. O'Day599 Central St. 850

Teacher of Housekeeping

Grace E. StevensChelmsford, Mass. 700

Teacher of Cooking

Ruth Upton63 Mt. Pernon St. 700

Janitor

Theodore Towner13 Third St.

Musical Director

Frederick O. Blunt14 Bellevue St.\$1,400

Assistant in Music

Jessie M. Hagar179 Pine Street 1,000

Supervisors of Drawing

Addie E. EdwardsMajestic Chambers, Suite No. 2 ...\$1,000

Helene R. Abels43 Nicollet St. 900

Teacher of Sewing

Ida J. Flint200 Liberty St.\$ 950

Assistant in Sewing

Esther M. Owens4 Belmont St.\$ 750

Manual Training

Ralph A. LuceChelmsford St., R. F. D. No. 1 ...\$1,100

Arthur Lundwall9 Osgood Ave.\$ 900

Supervisor of Penmanship

Fred Albinson8 Newbury St.\$ 300

Dental Clinic

Dr. E. A. Kent11 Harris Ave.\$ 600

Assistant to Dentist

Eva M. Lantagne14 Albion St.\$ 320

SCHOOL PHYSICIANS

Giving Names of Schools Supervised

C. Stoye Baker, M. D.4 Bond St.
Colburn Gr., Colburn Pri., Edson, Ames St., Central St.

John F. Boyle, M. D.32 Whipple St.
Butler, Lyon St., Carter St., Weed St., London St.

James J. Cassidy, M. D.111 Riverside St.
Green, Charles St., Worthen St., Kirk St., Cabot St., Vocational—Boys' Dept.

Winifred M. Wools-Devine, M. D.27 Parkview Ave.
Pawtucket, Greenhalge, Lakeview Ave., New Moody St., Lexington Ave.

George O. Lavalley, M. D.790 Merrimack St.
Varnum, Billings St., West Sixth St., Tenth St.

Joseph A. Meehan, M. D.4 Park St.
Bartlett, Franklin, Cross St., Vocational—Girls' Dept.

Charles M. Roughan, M. D.105 Merrill Ave.
Moody, Riverside, Pond St., Agawam St., Sycamore St.

Forster H. Smith, M. D.50 Putnam Ave.
Lincoln, Laura Lee, Grand St., Eliot

Edward O. Tabor, M. D.172 Shaw St.
Morey, Washington, Powell St., Middlesex Village, Dover St., Pine St.

SCHOOL NURSES

Marguerite J. O'Dwyer	148 Midland St.	\$ 700
Marietta M. Dwyer	23 Sidney St.	700

ABSENT ON LEAVE

*Nathan Pulsifer, M. D., Medical Director.	Ellen T. Muldoon, Permanent Substitute.
*Herbert R. Baker, Janitor.	*C. Fred Campbell, High School.
Elizabeth G. Common, Pawtucket School.	Loretta A. Hannafin, Cabot St. School.
Bethia S. Keith, Lincoln School.	*Leo A. King, Master of Edson School.
*Major Colby T. Kittredge, Military Instructor.	Bertha M. Rowlandson, Green School.
*On Military Service.	

PERMANENT SUBSTITUTES

Ellen T. Muldoon, Pelham, N. H.	Alice F. Morrill, 32 June St.
Hazel A. Gardner, 15 Columbus Ave.	Mary G. Dudley, 126 Coburn St.
Gertrude Weinbeck, 192 Wentworth Ave.	Celia B. Wood, 92 Fort Hill Ave.
Margery E. McMaster, 56 Rolfe St.	Mary F. Concannon, 204 Pleasant St.

EVENING SCHOOLS

EVENING HIGH SCHOOL

Henry H. Harris, Prin.	93 Eleventh St.
E. Helena Rivet, Principal's Assistant	271 Beacon St.
Orton E. Beach	624 Stevens St.
Stenography	
Albertine Bernier	91 West Sixth St.
Stenography	
Elmer G. Brennon	97 Georgia Ave.
Commercial Arithmetic, Algebra, and Geometry	
C. Fred Campbell (On Leave)	89 Georgia Ave.
Manual Training	
Albert W. Chilson	Y. M. C. A.
Manual Training	
Alice L. Cluin	130 Fort Hill Ave.
Elementary Grammar	
D. Murray Cummings	29 Huntington St.
Civil Service	
Grace Donovan	256 Branch St.
English and Ancient History	
Ruth L. Eaton	59 Pine St.
Typewriting I	
Peter J. Gulesian	18 Wildwood St., Chelmsford
Manual Training	
Elizabeth Irish	11 Willow St.
Literature	
Elizabeth C. Kennedy	223 Pine St.
Penmanship	

Raymond J. Kenney	.....1	West View St.
		Stenography I
Mary H. Killpartrick	.....27	Maryland Ave.
		Commercial Geography, Advanced Spelling, and Civil Government
Charles A. King	.....4	Astor St.
		Bookkeeping I
Sara Laporte	.....76	June St.
		French
Geneive E. Lawrence	.....53	Berkeley Ave.
		Elementary Grammar
Mildred E. Leeds	.....84	First St.
		Stenography I
Annabelle C. Lowney	.....86	Sherman St.
		Typewriting
Albert D. Mack	.....17	Summit St.
		Bookkeeping III
		Head of Commercial Department
Frances U. Masterson	.....352	Christian St.
		Spelling, General and American History
Loretta A. McManmon	.....57	Second Ave.
		Arithmetic
Hannah Estelle Moors	.....104	Moore St.
		Advanced Grammar
Adelaide E. Noyes	.....17	Princeton St.
		Elocution
Flora A. Owen	.....42	Huntington St.
		Stenography I
Lewis A. Putnam	.....19	Eighth Ave.
		Stenography II
Joseph G. Pyne	.....823	Central St.
		Advanced Arithmetic
Jesse D. Sallee	.....46	Rhodora St.
		Commercial Correspondence and Spelling
Ida L. Samuels	.....56	Fifth Ave.
		Stenography I
Charles E. Seede	.....88	Warwick St.
		Manual Training
Margaret L. Seeton	.....12	Third Ave.
		Stenography I
James A. Shanley	.....364	Lawrence St.
		Bookkeeping I
Beatrice M. Shea	.....267	Walker St.
		Penmanship
Raymond W. Sherburne	.....	Tyngsborough
		Arithmetic
Alice O. Stickney	.....599	School St.
		Rhetoric and Graduation English
Marie R. Sullivan	.....42	Forrest St.
		Bookkeeping II
Sadie A. Taff	.....235	Stackpole St.
		Penmanship

ELEMENTARY SCHOOLS

COLBURN

John E. Barr, Prin.	178	First St.
Katherine C. Early	256	E. Merrimack St.
Margaret C. Fox	8	Eddy St.
Maud E. Green	238	E. Merrimack St.
Mary E. Lane	14	Ellsworth St.
Elizabeth G. Lawler	260	High St.
Bride T. Sweeney	138	Pleasant St.

EDSON

Leo A. King, Prin. (On Leave)	4	Astor St.
Marguerite J. Cronin	228	Plain St.
Mary E. Crowley	903	Gorham St.
Annie V. Donoghue	11	Wesley St.
Susan C. Griffin	390	Wilder St.
Delia C. Maloney	70	Elm St.
Sadie E. Tully	105	Westford St.

GREEN

Paul L. Perkins, Prin.	248	Chelmsford St.
Agnes T. Courtney	11	Marsh St.
Esther G. Donlon	756	Westford St.
Helen A. Dow	149	B St.
Agnes T. Fay	123	Third St.
Mary A. Fay	123	Third St.
Esther V. Green	434	Westford St.
Mary F. Hill		Chelmsford St., Chelmsford.
Margaret S. Jamieson	53	So. Loring St.
Mary V. Johnson	183	Wilder St.
Marietta King	205	Stackpole St.
Loyola McCann	17	Wentworth Ave.
Margie F. Marren	86	Rolfe St.
Mary R. Marren	86	Rolfe St.
Elizabeth Provencher	22	West Bowers St.
Bertha M. Rowlandson	11	Holyrood Ave.
Grace Scribner	70	Tyler Park

Rooms in Cabot St. School

(For Girls Only)

Rose A. Dowd	127	Beacon St.
Alice A. Masterson	35	Oak St.

GREENHALGE

William W. Dennett, Prin.	55	Eighteenth St.
Mary L. Crowley	207	Appleton St.
Annie E. Irving	28	Walnut St.
Addie B. Merrill	465	Bridge St.
Addie M. Robbins	62	Twelfth St.
Martha Rogers	131	Cumberland Road
Mary E. Tobin	52	Highland St.

EVENING VOCATIONAL SCHOOL

Men's Department

Ernest O. Wheeler, Dept. Head	41	So. Walker St.
George H. Dozois	189	White St.
Fred F. Wiggin, Dept. Head	617	Chelmsford St.
Charles J. Rodgers	65	Butterfield St.
Chester W. MacDonald	22	Bellevue St.
Leon N. Roundy	No.	Billerica, Mass.
Edwin C. Wells	178	Perry St.
Charles R. Beane		Chelmsford, Mass.
Theodore Archibald		Dracut, Mass.
Carl A. Bishop	3	Blodgett St.
Michael F. Donahue	381	Dutton St.
Charles J. Welsh	77	Billings St.
Guy Whitney	132	B St.
John H. McGuinness	682	Broadway
Maurice A. Butterfield	12	June St.
Clara I. Farrington	182	Perry St.

Girls' Department

Esther M. Downing, Department Head	434	Westford St.
Ruberta M. Bramhall, Department Head	84	Tenth St.
Anna W. Dennett	55	Eighteenth St.
Katherine Humphrey	156	Tenth St.
Myrtle Killparick	27	Maryland Ave.
Anna T. McCarron	228	High St.
Modwena Rowlandson	136	Parkview Ave.
Harriet Sturtevant	34	Nesmith St.
Ruth Upton	63	Mt. Vernon St.
Anna M. O'Day, Department Head	599	Central St.
Emily Block	31	Georgia Ave.
Mary L. Dupuis	74	Beaulieu St.
Margaret McGurn	852	Central St.
Orina B. Mongrain	1056	Bridge St.
Nellie Rourke	33	Marion St.
Helen Rouse	201	Summer St.
Alice Roussel	77	Ludlam St.
Elizna Secord	118	Stevens St.
Rose Ward	635	Broadway
Agnes R. Burns	427	Lakeview Ave.
Agnes McAloon	78	Mt. Washington St.
Grace Stevens		Chelmsford, Mass.
Mary N. Devine	231	School St.
Mary H. Mehan	40	Sixth St.
Helen F. O'Rourke (Temporary)	154	Shaw St.

SALARY SCHEDULE

High School

1917

Head Master	\$3,000
Sub-Masters	2,400
Men Teachers	\$900 to 1,700
(First year, \$900; second year, \$1000; third and fourth years, \$1200; fifth and sixth years, \$1400; seventh, eighth and ninth years, \$1500; tenth year, \$1700; department head, \$100 in excess of schedule salary.)	
Women Teachers	\$650 to \$1200
(First year, \$650; second year, \$700; third and fourth years \$800; fifth and sixth years \$900; seventh, eighth and ninth years \$1000; tenth year, \$1100; eleventh year, \$1200.)	

Elementary Schools

Masters (with yearly increase of \$100)	\$1300 to \$2200
Teachers	500 to 900
(First year, \$500; second year, \$550; third year, \$600; fourth year, \$650; fifth, sixth and seventh years, \$750; eighth and ninth years, \$800; tenth year \$900.)	

Principals of Primary Schools

School of two rooms, \$25 in addition to regular grade salary.

School of three or more rooms, \$50 in addition to regular grade salary.

Kindergartens

Principals	\$700
Assistants	\$500 to \$650
(First year, \$500; second year, \$550; third year, \$600; fourth year, \$650.)	

Temporary Teachers

Men, per day	\$3.00
Women, per day	2.50
Kindergartens, per day	1.75

Special Teachers

Drawing	\$800 to \$1000
Music	800 to 1400
Sewing	700 to 950

TEACHERS' CERTIFICATES

(Granted Since January 1, 1917)

First Grade

James J. Kelley, Boston College, 1917	Lowell, Mass.
A. Morgan McEvoy, Harvard, 1917-1917	Lowell, Mass.

Second Grade

Ruth Emerson, Radcliffe, 1917	Chelmsford, Mass.
Gladys W. Mevis, Smith, 1917	Lowell, Mass.
Esther Alice Owens, Boston University, 1917	Lowell, Mass.
Catherine E. O'Keefe, Boston University, 1917	Lowell, Mass.
Ada L. Sherburne, Smith, 1916	Tyngsboro, Mass.
Mary E. Tobin,	Lowell, Mass.

Third Grade

Katherine F. Baker
Ruth F. Hathaway,
Gertrude A. Hession,
Jane T. Johnston,
Helen L. Mansfield,
Alberta M. McQuesten,
Katherine C. O'Neill,
Esther A. Sanders,
Sadie A. Taff.

Fourth Grade

Anna W. Bartlett, Perry Kindergarten, '17	Marblehead, Mass.
Doris Childs, Perry Kindergarten, '17	Lowell, Mass.
Evelyn L. Staples, Wheelock Kindergarten, '17	Brattleboro, Vt.

**SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS OF THE CITY OF LOWELL FOR THE YEAR
ENDING JUNE 30, 1917. WITH NUMBER OF PUPILS BELONGING DECEMBER, 1917.**

SCHOOL	LOCATION	Whole No. Enrolled			No. of Pupils Belonging Dec. 1917			Whole No. Pupils on Registers Since Sept. 1, 1916			Average No. of Pupils Belonging to School			Average Daily Attendance			No. ent'd not rec'd from any other public school	No. rec'd from other public schools of lower grade	No. rec'd from other public schools of higher grade	No. sent to other public schools of same grade	Per cent. of attendance	No. of class-rooms in regular use	No. of seats or sittings in these rooms	
		Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total								
High	Kirk and Anne St.	816	975	1791	686	837	1523	816	975	1791	727	882	1609	699	841	1540	96	468	30	41	26.95	7	50	1723
Grammar																								
Bartlett	Wannalancit St.	222	252	474	210	251	461	240	266	506	211	235	446	197	218	415	25	83	29	53	12.93	0	12	604
Butler	Gorham St.	370	368	738	311	321	635	376	371	750	327	337	664	303	310	613	41	144	64	63	28.92	0	16	798
Colburn	Lawrence St.	197	203	400	148	152	300	208	212	420	168	170	338	160	158	318	41	82	20	13	31.94	0	8	371
Edson	Highland and South St. ...	236	232	468	194	190	384	247	244	491	206	204	410	195	191	386	132	55	24	18	40.94	1	10	513
Green	Merrimack St.	324	262	586	219	170	389	329	262	591	238	194	432	221	177	398	136	55	24	18	28.91	0	12	604
Greenhalge	Ennell St.	195	195	390	186	201	390	209	216	425	160	168	328	149	155	304	45	76	24	13	25.93	0	10	480
Lincoln	Chelmsford St.	305	315	620	278	295	573	312	322	634	286	295	581	262	270	532	12	101	14	63	11.92	0	13	660
Moody	Rogers and High St.	225	209	434	191	198	389	237	227	464	201	196	397	185	182	367	27	79	40	32	25.92	0	10	500
Morey	Pine and Wilder St.	352	360	712	368	373	741	358	373	731	313	322	635	294	301	595	20	103	76	40	25.92	7	15	710
Pawtucket	Mammoth Road	246	253	499	218	219	437	246	253	499	211	221	432	200	209	409	63	91	13	39	15.94	0	9	475
Riverside	Woburn St.	93	96	189	81	79	160	95	98	193	83	85	168	79	78	157	13	38	8	15	7.93	0	4	181
Varnum	Myrtle and Beech St.	323	314	637	304	281	585	375	375	750	318	311	629	299	293	592	63	142	36	51	17.95	0	15	776
Washington	Avery and Lang St.	167	183	350	173	183	356	177	194	371	165	177	342	151	166	320	5	29	38	41	13.94	0	8	388
	Total	3255	3272	6527	2881	2919	5800	3109	3416	6825	2887	2915	5802	2698	2708	5406	513	1103	434	505	292.93	2	142	7060

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS—(Continued)

Primary	27	28	50	22	19	41	29	24	53	26	21	47	24	18	42	3	10	3	16	990 0	2	85
Agawam St.	69	77	146	68	58	126	74	80	154	57	65	122	53	60	113	69	0	8	28	1692 0	3	168
Ames St.	109	118	227	105	115	220	118	130	248	93	113	206	84	101	185	81	1	27	56	590 0	5	201
Bartlett	59	46	105	50	42	92	69	65	124	48	36	84	43	33	76	102	1	70	691 0	3	162	
Billings St.	110	105	216	104	70	174	108	110	218	68	60	128	62	48	110	136	0	7	24	186 0	3	152
Cabot St.	53	73	126	44	51	95	58	73	126	45	58	103	59	52	91	2	0	6	30	1389 0	3	168
Central St.	49	45	94	41	40	84	60	52	112	42	35	77	37	30	67	46	8	21	19	589 0	2	102
Charles St.	65	77	142	61	86	147	75	85	160	63	61	124	59	61	120	43	1	9	32	1894 0	4	192
Colburn	109	73	182	96	78	174	121	83	204	88	64	152	81	54	135	182	20	2	32	2489 0	6	251
Cross St.	61	65	126	48	52	101	69	69	138	47	55	102	42	48	90	44	22	17	26	1288 0	3	133
Dover St.	79	80	159	65	65	130	85	87	172	65	69	134	62	63	125	32	20	13	42	1390 0	3	154
Summer and Favor St.	75	83	158	79	57	136	83	94	177	59	65	124	54	61	115	67	0	19	23	2293 0	4	220
Eliot	73	67	110	49	58	107	77	73	150	65	66	121	56	62	108	28	15	17	38	1491 0	3	142
Franklin	70	63	135	67	60	127	82	78	160	58	53	111	54	47	101	26	35	19	35	1491 0	3	144
Grand St.	81	73	153	87	64	131	90	92	182	61	60	121	60	54	114	72	4	7	40	890 0	3	145
Greenhalge	28	15	43	10	13	23	28	15	43	17	9	26	16	7	23	40	0	3	3	488 0	1	30
Kirk St.	66	62	128	67	63	130	78	66	139	56	52	108	51	48	99	24	18	25	22	1293 8	3	160
Lakeview Ave.	145	122	267	126	117	243	152	125	277	127	99	206	115	91	206	43	12	55	59	2290 0	5	280
Laura Lee	70	55	132	63	50	113	83	54	137	70	50	120	66	47	113	45	0	5	34	294 0	3	152
London St.	67	50	110	50	45	95	60	50	110	52	42	94	49	39	88	54	3	9	29	893 0	2	107
London and West St.	103	89	192	61	67	128	108	94	202	91	80	171	83	74	157	98	18	10	48	992 0	4	187
Moody St.	30	28	58	37	34	71	33	28	61	23	22	45	21	20	41	5	0	1	7	592 0	1	48
Pawtucket	76	63	139	76	63	144	83	64	147	69	48	11	62	43	105	36	25	13	7	990 0	3	168
Pine St.	101	86	187	91	76	167	108	90	198	95	67	162	81	61	145	56	17	18	36	4489 0	4	193
Pond St.	56	45	101	46	57	103	58	47	105	51	40	91	46	36	82	33	3	9	29	690 2	2	105
Powell St.	51	59	110	41	45	89	57	63	120	46	50	96	42	45	87	61	0	9	41	1191 4	2	105
Riverside	109	101	210	69	35	31	66	43	75	36	28	62	32	25	69	0	6	19	390 0	2	102	
Sycamore St.	49	28	69	35	31	66	43	75	36	28	62	32	25	69	0	6	19	390 0	2	102		
Tenth St.	109	101	210	96	90	186	110	109	219	85	78	163	76	69	145	58	23	55	2189 0	4	211	
Washington	75	74	149	65	55	120	83	75	158	69	67	136	63	60	123	41	15	13	0	694 0	3	141
West Washington	54	48	102	48	33	82	54	48	102	47	36	83	43	32	75	11	17	4	14	290 0	2	105
Gorham and Weed St.	94	98	192	98	91	189	105	107	212	82	85	167	76	79	155	54	15	24	40	1893 0	4	220
West Sixth St.	55	72	127	67	73	140	55	72	127	41	59	100	38	55	93	51	0	4	19	492 0	3	159
Worthen St.	2309	2166	4175	2069	1923	3992	2486	2324	4810	1942	1783	3725	1773	1613	3386	1712	303	389	930	866 90	9	4885
Total																						

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS—(Continued)

INDEX

Administration	4
Attendance Officers' Report	33
Certificates granted	56
Elections	29
Evening Schools	30
Evening School Summary	32
Evening School Teachers	51-54
General statistics	7-8
High school	21-22
In memoriam	20
Manual training and cooking	26
Medical and dental supervision	22-24
Naturalization class	30-31
Organization of School Committee, 1917	3
Organization of School Committee, 1918	5
Pupils by grades	21
Receipts and Expenditures	9-12
Receipts and Expenditures (Discussion)	13-14
Resignations	18-19
Retirements	18
Roll of day teachers	35-51
Salary Schedule	55
Schoolhouses	16-18
School and home gardens	29
School census	14-16
School nurses	23
School physicians	22
School savings banks	25
School hours	30
Sight and hearing tests	24
Summary of annual returns	57-59
Teachers' examinations	28-28
Text books and supplies per capita	11-12
Training schools	28-29
Vacations	31
Vocational school	26-27

CITY OF LOWELL

MASSACHUSETTS

EIGHTY-SECOND ANNUAL REPORT

OF THE

CITY AUDITOR



FOR THE FINANCIAL YEAR

1917

Municipal Council

1917

MAYOR

JAMES E. O'DONNELL, Public Safety

ALDERMAN

JAMES E. DONNELLY, Finance

ALDERMAN

CHARLES J. MORSE, Streets and Highways

ALDERMAN

FRANCIS A. WARNOCK, Property and Licenses

ALDERMAN

GEORGE H. BROWN, Fire and Water

CITY OF LOWELL

Lowell is situated at the confluence of the Merrimack and Concord Rivers.

Was settled in 1653, called Chelmsford Grant. First Town Meeting in 1654.

Was originally a part of Chelmsford.

Incorporated as a Town in 1826.

Incorporated as a City in 1836.

Part of Tewksbury annexed in 1834, 1874, 1898, 1906.

Part of Dracut annexed in 1851, 1874, 1879.

Part of Chelmsford annexed in 1826, 1874.

Population, 117,000.

Has 217.8 miles of streets, 144.8 accepted, 73. unaccepted.

Has 119.52 miles of sewers, costing \$6,697,669.86.

Has an area of 14.1 square miles.

Assessed valuation \$90,820,901.50, and 28,210 assessed polls.

Tax rate \$23.40 per \$1000.00, per cent. of valuation 100.

Bonded indebtedness \$5,494,496.30, sinking funds \$1,506,685.50.

Net bonded indebtedness \$3,242,810.80.

City Hall and Memorial Building costing \$450,000.

School Department—62 buildings costing \$2,500,000.00, 352 teachers, 16,530 scholars.

Fire Department—14 buildings, 6 engines, 4 hook and ladder trucks, 3 autos, 9 auto combinations, 2 chemicals, 6 hose wagons, 156 alarm boxes, 133 miles wire, 167 officers and men.

Police Department—1 station, 2 auto patrols, 2 patrol wagons, 166 officers and men, 70 signal boxes.

Water Department—Date of construction, 1870 to 1873; high service, 1881; driven wells, 1893 to 1916.

Source of supply—Two hundred ten (210) driven wells in the valley of River Meadow Brook, and four hundred seventy-nine (479) driven wells at Pawtucket Boulevard.

Mode of supply—Pumping to reservoir and pumping direct. Filtered through coke and sand.

Daily capacity 14,000,000 gallons; 157.46 miles mains; 1457 fire hydrants; reservoir capacity 5 days' supply; consumes 5,442,967 daily.

Park Department—150.322 acres of parks and playgrounds valued at \$696,375.00.

Has five National Banks, two Trust Companies.

Has eight Savings Banks.

Has three Co-operative Banks.

Has 16½ miles waterways.

Develops about 30,000 h. p. daily by means of 6½ miles of canals which furnish power for manufacturing plants.

Has the largest Textile School.

Has more than 1000 manufacturing plants.

Auditor's Department

CITY OF LOWELL, MASSACHUSETTS

That the Auditor, with the exception of monthly bills approved by the Municipal Council, issue no draft to pay any bill without THREE signatures of the Municipal Council.

All bills or claims for work performed must be presented to the DEPARTMENT ORDERING SAME; those for supplies furnished and contracts must be presented to the PURCHASING AGENT.

All bills or claims must be received by the City on or before the FIRST day of the month.

All department receipts must be sent to the Purchasing Agent on or before the THIRD day of the month.

All bills or claims shall be presented to the Commissioner of the Department contracting the same on or before the THIRD day of each month.

All bills after approval by the Commissioner, shall be listed and sent to the Auditor's Department not later than the EIGHTH day, for final approval by the Municipal Council.

ALL BILLS OR OTHER CLAIMS, BEFORE THEY ARE FINALLY CERTIFIED BY THE AUDITOR OR PAID SHALL BE APPROVED BY THE MUNICIPAL COUNCIL.

Bills will be paid on the FIFTEENTH day of each month.

OFFICES IN THE CITY HALL ARE OPEN FROM 9 A. M. UNTIL 4 P. M.

Finance Department

CITY AUDITOR'S OFFICE

CITY OF LOWELL, MASSACHUSETTS

To the Honorable the Mayor and Municipal Council,

GENTLEMEN:—

I herewith present the Annual Report of the Auditing Department for the year 1917.

The receipts for the year 1917 amounted to \$5,329,948.13 from all sources, and the payments \$5,254,409.80. All department bills were paid, a balance left, and the City lived within its income.

The loans made for construction work within the debt limit amounted to \$555,000.00, the amount outside the debt limit \$225,000.00.

The values of all Sinking Funds are as follows: Water Works loan \$1,000,000.00, due 1920 \$860,752.52; High School loan \$150,000.00, due 1921 \$132,846.32; City Hall, Memorial Building loan \$450,000.00, due 1920 \$391,634.24; New School Houses loan \$200,000.00, due 1926 \$121,452.42.

Information with regard to the assets and liabilities, indebtedness, receipts and payments, valuation of City property, trust funds, and a general review of accounts will be found in the report.

The accounts of all departments of the City were audited by Mr. Everett E. Tarbox, certified municipal accountant, whose report is included in the book.

Respectfully submitted,

CHAS. D. PAIGE,

Auditor.

May 2, 1918.

**ASSETS AND LIABILITIES OF THE CITY OF LOWELL,
DECEMBER 31, 1917**

Assets

Ordinary City Debt Sinking Fund.....	\$ 645,932.98
Water Debt Sinking Fund.....	860,752.52
Outstanding Assessments:	
Taxes	765,645.65
Sidewalk	4,878.10
Sewers	9,709.69
Street Watering	10,902.35
Moth	1,233.99
Department Bills	11,224.67
Cash Balance December 31.....	389,792.57
Total Available Assets.....	<u>\$2,700,072.52</u>
Valuation of Water Works, both Real Estate and Personal Property	\$2,029,376.67
Valuation of City Buildings, Land, Personal Property..	6,202,822.33
Total Unavailable Assets.....	<u>\$8,232,199.00</u>
Total Available Assets.....	\$2,700,072.52
Total Unavailable Assets.....	<u>8,232,199.00</u>
Grand Total	<u>\$10,932,271.52</u>

Liabilities

Ordinary City Debt.....	\$2,879,087.60
Water Works Debt.....	1,479,750.00
Total Gross City Debt.....	<u>4,358,837.60</u>
Temporary Loan	1,000,000.00
Balance Unexpended	364,387.41
Total Liabilities	<u>5,723,225.01</u>
Surplus of Assets.....	5,209,046.51
Grand Total	<u>\$10,932,271.52</u>

City Auditor's Report

Receipts and Payments for the Year 1917, Consolidated

Cash Balance, January 1, 1917.....	\$314,254.24
Cash Receipts	\$3,804,822.61
Temporary Accounts	1,525,125.52
	<hr/>
	\$5,329,948.13
 Cash Payments	 \$3,729,284.28
Temporary Accounts	1,525,125.52
	<hr/>
	5,254,409.80
Excess of Payments.....	75,538.33
	<hr/>
Cash Balance December 31, 1917.....	\$389,792.57

Receipts and Payments of the Financial Year Classified, 1917.

	Receipts	Payments
* Operation and Maintenance.....	\$3,020,239.40	\$3,062,794.15
† New Construction	784,583.21	666,490.13
Total Cash proceedings for the year.	\$3,204,822.61	\$3,729,284.28
§ Temporary Accounts	1,525,125.52	1,525,125.52
Total proceedings for the year.....	\$5,329,948.13	\$5,254,409.80

* *Operation and Maintenance* relate only to the General Treasury Revenue and Payments, and do not include receipts and payments on account of loans or permanent construction.

† *Construction* relates only to General Treasury Loans receipts and payments for permanent construction.

§ *Temporary Accounts* are simply Journal items (duplications), receipts and payments which are temporarily held and paid out again, and show the same amounts in both receipts and payments.

TEMPORARY ACCOUNTS

	Receipts	Payments
Temporary Tax Loans.....	\$1,400,000.00	\$1,400,000.00
Refunds and Transfers.....	125,125.52	125,125.52
	\$1,525,125.52	\$1,525,125.52

CITY OF LOWELL

BALANCE SHEET

REVENUE ACCOUNTS

December 31, 1917

Dr.		Cr.
\$ 57,139.57	....Revenue cash	
434.00	....Taxes 1911.....	
285.60	.... " 1914.....	
14,412.96	.... " 1915.....	
210,618.08	.... " 1916.....	
539,895.01	.... " 1917.....	
.15	....Moth 1914.....	
1.25	.... " 1915.....	
457.27	.... " 1916.....	
775.32	.... " 1917.....	
18.56	....Street Sprinkling 1914.....	
18.89	.... 1915.....	
3,638.21	.... 1916.....	
7,226.69	.... 1917.....	
2,778.89	....Tax Titles	
4,878.10	....Sidewalk Assessments	
9,709.69	....Sewer Assessments	
11,224.67	....Department Accounts Rec.....	
3,348.91	....Cemetery Accounts Rec.....	
	....Water Accounts Rec.....	\$ 5,799.23
	....Tax Revenue Loans.....	727,387.74
	....Revenue Appropriations	24,355.11
3,428.95	....Overlay 1914.....	
	.... 1915.....	4,052.31
	.... 1916.....	17,344.69
	.... 1917.....	42,406.19
	....Cemetery Revenue	3,348.91
5,799.23	....Water Revenue	
	....Revenues	29,179.27
	....Premium	7,628.76
	....Sidewalk Revenue	4,878.10
	....Sewer Revenue	9,709.69
<hr/>		<hr/>
\$876,090.00		\$876,090.00

NON-REVENUE ACCOUNTS

\$332,653.00	....Cash	
	....Appropriations	\$332,653.00
	....Loans Authorized	
<hr/>		<hr/>
\$332,653.00		\$332,653.00

CITY OF LOWELL

BALANCE SHEET

INDEBTEDNESS

December 31, 1917

Sinking Funds		Funded Debt	
Cash and Securities			
City Hall Fund.....	\$ 391,634.24	City Hall Loan payable 1920	\$ 450,000.00
High School Fund..	133,056.46	High School Loan payable 1921	150,000.00
New Schoolhouse Fd.	121,242.28	New Schoolhouse Loan payable 1926	200,000.00
Water Construction Fund	860,752.52	Water Construction Loan payable 1920	1,000,000.00
Net Bonded Debt...	3,237,810.80	General City $3\frac{1}{2}$ Loan	24,000.00
		4	2,158,656.30
		$4\frac{1}{4}$	103,600.00
		$4\frac{1}{2}$	582,040.00
		5	50,000.00
		Nesmith Fund 1870.	25,000.00
		Nesmith Fund 1970.	1,000.00
		City paying 6%	
	<u>\$4,744,496.30</u>		<u>\$4,744,496.30</u>

TRUST FUNDS

Cash and Securities..	\$ 251,212.41	Carney Medal Fund..	\$ 200.00
Cash Used by City in 1870, and now paying 6%	26,200.00	Hapgood Wright Fd.	5,443.90
		John Davis Library Fund	97,496.21
		Jonathan Tyler Fund	10,000.00
		Thos. Nesmith Fund	25,000.00
		Thos. Nesmith Fund	1,000.00
		Cemetery Perpetual Care	124,607.30
		Unpaid Debt and Interest	13,665.00
	<u>\$ 277,412.41</u>		<u>\$ 277,412.41</u>

CITY OF LOWELL

Dec. 31, 1917

THE MUNICIPAL DEBT

Gross Debt.

Total Ordinary City Debt, January 1, 1917.....	\$2,879,087.60
Total Water Works Debt, January 1, 1917.....	1,479,750.00
Total Tax Revenue Loans, July 31.....	1,000,000.00
Gross Debt	\$6,358,837.60

Net City Debt

Total Ordinary Debt, January 1, 1917.....	\$2,879,087.60
Loans to October 31.....	780,000.00
Total	\$3,659,087.60
Payments	347,341.30
Total	\$3,311,746.30
Sinking Funds	645,932.98
Net Debt	\$2,665,813.32

Net Water Debt

Total Ordinary Water Debt, January 1, 1917.....	\$1,479,750.00
Sinking Fund	860,752.52
	\$ 618,997.48
Payments	47,000.00
	\$ 571,997.48

Total Net City and Water Debt

City	\$2,665,813.32
Water	571,997.80
	\$3,237,810.80

LIMIT OF INDEBTEDNESS

December 31, 1917.

City	\$2,879,087.60
Water	1,479,750.00
Revenue Tax Loan.....	800,000.00
	\$5,158,837.60

Total Gross Debt, January 1, 1917.....	\$5,158,837.60
Deduct by legislation:	
Water	\$1,479,750.00
Special Legislation	1,035,000.00
Revenue Tax Loan.....	800,000.00
	3,314,750.00

City Debt as Relates to Limit of Indebtedness.....	\$1,844,087.60
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Limit of Municipal Debt for 1917.....	\$2,298,191.45
City Debt as Relates to Limit.....	1,844,087.60
	\$ 454,103.85

Distance from Debt Limit Dec. 31, 1917.....	\$ 136,559.16
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Loans 1917

Sewer Construction	20 years	\$ 60,000.00
Paving	10 years	50,000.00
New High School, Acts 1915.....	20 years	75,000.00
Macadamizing	5 years	70,000.00
Sidewalks	2 years	10,000.00
Park—Varnum Ave.	20 years	20,000.00
Playground—Chambers St.	14 years	7,000.00
Isolation Hospital	15 years	175,000.00
Pawtucket Bridge	15 years	24,000.00
German War	1 year	50,000.00
Fair Ground Park.....	20 years	20,000.00
School Additions	20 years	170,000.00
School Additions	10 years	10,000.00
Isolation Hospital Equipment.....	16 years	24,000.00
Sewer Construction	15 years	15,000.00
		\$780,000.00

CLASSIFICATION OF
RECEIPTS AND PAYMENTS
BY SCHEDULES
Year of 1917

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Revenue for Outlays	Total
General Revenue			
1 Taxes:			
Current Year—			
1 Property	\$1,624,111.19		
2 Poll	25,792.00		
Previous Years—			
3 Property	499,135.32		
4 Poll	19,170.00		
From the State—			
5 Corporation	182,549.74		
6 Street Railway (exclus- ive of Boston Elevated excise tax)			
7a Bank	2,349.96		
b Business	625.78		
c Income	147,438.42		
Tax Title Redemptions	440.12		
Total from Taxes.....	\$2,501,612.53		\$2,501,612.53
2 Licenses and Permits:			
Licenses—			
8 Liquor	\$147,445.00		
9 All Other			
Permits—			
10 Marriage	1,394.00		
11 All Other	11,288.50		
Total from Licenses and Permits	\$160,127.50		\$160,127.50
3 Fines and Forfeits:			
12 Court	\$6,132.94		
13 Department Penalties .			
14 Contract Violations ...			
Total from Fines and Forfeits	\$6,132.94		\$6,132.94
Total forward			\$2,667,872.97

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Revenue for Outlays	Total
Total forward			\$2,667,872.97
4 Grants and Gifts:			
Grants from Other Civil Divisions—			
15 From State, for Education			
a Support of Public Schools			
b Aid to High Schools.			
c Aid to Industrial Schools			
d High School Tuition			
e Union Superintendency			
16 From State, for Armories			
17 From State, for Highway Purposes			
18 From State, for Other Purposes			
a Inspector of Animals			
b Protection Against Forest Fires			
19 From County (Dog Licenses), for Schools or Libraries	\$3,599.78		
Gifts from Individuals—			
20 For Expenses			
21 For Outlays			
Total from Grants and Gifts	\$3,599.78		\$3,599.78
5 All Other General Revenue:			
22			
23			
Total from All Other General Revenue			
Total forward			\$2,671,472.75

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Revenue for Outlays	Total
Total forward			\$2,671,472.75
Commercial Revenue			
6 Special Assessments:			
24 Street Sprinkling	\$23,296.43		
25 Moth Extermination ..	2,405.31		
26 Sewers	9,051.94		
27 Sidewalks and Curbing	6,731.15		
28 Other Purposes			
Total from Special As- sessments	\$41,484.83		\$41,484.83
7 Privileges:			
29 Public Service			
30 Minor			
Total from Privileges....			
Total forward			\$2,712,957.58

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,712,957.58
8 Departmental:			
8a General Government			
Legislative—			
31 Aldermen and Council;			
Executive—			
32 Mayor; Commission;			
Selectmen			
Financial—			
33 Auditor, Accountant, and Auditing			
34 Treasurer	\$1,877.08		
35 Collector			
36 Assessors			
37 License Commissioners.	167.00		
38 Other Finance Offices and Accounts			
Other General Departments			
39 Law			
40 City or Town Clerk...	928.53		
General Gov'nment f'wd	\$2,972.61		
Total forward			\$2,712,957.58

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
1 Departmental:			
1a General Government			
Legislative—			
1 Aldermen and Council; Moderator			
a Salaries and Wages.	\$10,000.00		
b Other Expenses	4,843.70		
Executive—			
2 Mayor; Commission; Selectmen			
a Salaries and Wages.	4,200.00		
b Other Expenses	300.50		
Financial—			
3 Auditor, Accountant, and Auditing	1,296.00		
a Salaries and Wages.	5,050.00		
b Other Expenses ...	1,251.64		
4 Treasurer and Collector			
a Salaries and Wages.	11,729.18		
b Other Expenses	3,756.77		
6 Assessors			
a Salaries and Wages.	14,450.25		
b Other Expenses	1,546.07		
7 License Commissioners			
a Salaries and Wages.	3,800.00		
b Other Expenses	306.98		
Other General Departments			
9 Law			
a Salaries and Wages.	3,914.38		
b Other Expenses	795.27		
10 City or Town Clerk			
a Salaries and Wages.	7,947.96		
b Other Expenses	566.82		
General Gov'nment f'wd	\$75,755.52		

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,712,957.58
General Gov'nment f'wd	\$2,972.61		
41 City Messenger			
42 Public Works			
43 Engineering			
44 Supt of Buildings.....			
45 Election and Registra- tion	4.80		
46 Other General Depts...			
Municipal Buildings—			
47 City or Town Hall....			
Total for Gen'l Gov't...	\$2,977.41		\$2,977.41
8b Protection of Persons and Property			
Police Department—			
48 Services of Officers...			
49 Sale of Materials.....			
50 Miscellaneous	\$ 571.90		
Rental Court by County	2,950.00		
Protection of Persons and Property forward ...	\$3,521.90		
Total forward			\$2,715,934.99

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
General Gov'nment f'wd	\$75,755.52		
11 City Messenger			
a Salaries and Wages.	1,400.00		
b Other Expenses	135.63		
13 Engineering			
a Salaries and Wages.	6,365.37		
b Other Expenses	595.27		
14 Supt. of Buildings			
a Salaries and Wages.	1,999.90		
15 Election and Registra-			
a Salaries and Wages.	16,069.98		
b Other Expenses	4,557.79		
16 Other General Depts.			
Purchasing Agent—			
a Salaries and Wages.	6,297.36		
b Other Expenses	1,095.87		
Municipal Buildings—			
17 City or Town Hall			
a Salaries and Wages.	11,664.84		
b Other Expenses (in-			
cluding heating Me-			
morial Building) ..	10,365.43	\$366.87	
Total for Gen'l Gov't...	\$136,302.96	\$366.87	\$136,669.83
1b Protection of Persons and			
Property			
Police Department—			
18 Salaries and Wages...	\$170,871.72		
19 Horses and Care of			
Same	571.08		
20 Equipment and Repairs	531.31		
22 Maintenance of Build-			
ings and Grounds....	103.39		
24 Other Expenses	5,210.32		
Insurance	5,377.09		
Police Wires		\$1,268.44	
Waterways — Safety			
Fencing		1,829.94	
Protection of Persons and			
Property forward	\$182,664.91	\$3,098.38	
Total forward			\$136,669.83

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,715,934.99
Protection of Persons and Property forward ...	\$3,521.90		
Fire Department—			
51 Sale of Materials.....			
52. Miscellaneous	10.00		
Militia—			
53 Armories			
54 Rifle Ranges			
Inspection—			
55 Inspection of Buildings			
56 Inspection of Wires...	425.63		
57 Sealing of Weights and Measures	1,056.97		
Forestry—			
58 Insect Pest Extermin- ation	73.30		
59 Planting and Trimming Trees			
60 Forest Fires			
Other Protection of Persons and Property—			
61 Bounties			
62			
63			
Total from Protection of Persons and Property	\$5,087.80		\$5,087.80
Total forward			\$2,721,022.79

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$136,669.83
Protection of Persons and Property forward	\$182,664.91	\$3,098.38	
Fire Department—			
25 Salaries and Wages...	176,181.62		
26 Horses and Care Same	10,186.41		
27 Equipment and Repairs	3,814.91	1,875.00	
28 Hydrant Service			
29 Fuel and Light.....	6,237.81		
30 Maintenance of Buildings and Grounds....	1,562.79		
31 New Buildings			
32 Other Expenses	5,160.84		
Fire Alarm Boxes—			
keyless doors		875.00	
Automobile Ladder			
Truck Chassis		3,500.00	
Autos, Fittings and Supplies	3,909.06	2,035.00	
Militia—			
33 Armories			
34 Rifle Ranges	1,194.70		
Inspection—			
35 Inspection of Buildings	65,580.71		
Forestry—			
38 Insect Pest Extermination	7,488.93		
39 Planting & Trim. Trees			
40 Forest Fires			
Other Protection of Persons and Property—			
41 Bounties			
42 Fish Wardens	150.00		
43 Pound Keeper	5.00		
Total for Protection of Persons and Property.	\$470,851.11	\$11,383.38	\$482,234.49
Total forward			\$618,904.32

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,721,022.79
8c Health and Sanitation:			
Health—			
64 Quarantine and Con- tagious Diseases Hos- pitals			
65 Tuberculosis			
66 Miscellaneous	\$2,243.11		
67 Inspection			
Sanitation—			
68 Sewers and Sewage Dis- posal	23.18		
69 Sewer Construction ...		3.80	
70 Refuse and Garbage Dis- posal	4,266.65		
71 Street Cleaning			
Sewer Connections ...	549.74		
Other Health and Sanita- tion—			
72 Comfort Station	336.54		
73			
Total from Health and Sanitation	\$7,419.22	\$3.80	\$7,423.02
Total forward			\$2,728,445.81

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$618,904.32
1c Health and Sanitation—			
Health—			
45 General Administration	\$ 4,372.00		
46 Quarantine and Contagious Disease Hospitals		\$ 2,800.00	
47 Tuberculosis	10,492.78		
48 Vital Statistics	979.85		
49 Other Expenses	11,784.08		
Isolation Hospital		148,069.45	
50 Inspection			
a Inspection of School Children	800.00		
b Inspection of Animals	507.00		
c Inspection of Meat and Provisions	939.00		
d Inspection of Milk and Vinegar	3,352.23		
Inspection of Smoke	333.73		
Sanitation—			
51 Sewer Maintenance and Operation	15,977.04		
53 Sewer Construction ..		71,140.34	
54 Refuse and Garbage Disposal	71,811.46		
Other Health and Sanitation			
56 Sanitaries and Public Convenience Stations.	6,692.86		
Total for Health and Sanitation	\$127,542.03	\$222,009.79	\$349,551.82
Total forward			\$968,456.14

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,728,445.81
8d Highways:			
74 General	\$ 370.50		
75 Construction			
76 Sidewalks and Curbing (Granolithic)		\$ 426.78	
77 Snow and Ice Removal			
78 Sprinkling	198.65		
80 Miscellaneous			
Construction — Macad- amizing		1,767.00	
Construction—Paving		1,070.43	
Total from Highways...	\$569.15	\$3,264.21	\$3,833.36
8e Charities:			
81 Almshouse or Town Farm			
a Sale of Produce and Stock	\$ 33.95		
b Board	1,865.07		
c Miscellaneous	47.71		
82 Reimbursements for Relief Given			
a From Individuals ...	6.00		
b From Other Cities and Towns	297.26		
c From the State....	2,113.83		
83 Reimbursements for Mothers' Aid			
a From Individuals ...			
b From Other Cities and Towns	240.00		
c From the State....	3,321.66		
84 Municipal General Hos- pitals			
85 Miscellaneous			
Total from Charities....	\$7,925.48		\$7,925.48
Total forward			\$2,740,204.65

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$968,456.14
1d Highways:			
60 General Administration			
61 General Highway Exp.	\$169,983.96	\$210,502.30	
62 Construction			
63 Sidewalks and Curbing			
64 Snow and Ice Removal			
65 Sprinkling			
a Water	26,938.91		
b. Other			
66 Lighting	120,718.64		
67 Other Expenses			
c State Highway	1,325.00		
Total for Highways.....	\$318,966.51	\$210,502.30	\$529,468.81
1e Charities:			
68 General Administration	\$ 5,757.81		
69 Almshouse or Town Farm	87,481.89		
70 Outside Relief by City or Town	16,249.44		
71 Relief Given by Other Cities and Towns....	2,304.18		
72 Mothers' Aid			
a Relief Given by City or Town	39,601.85		
b Relief Given by Other Cities and Towns..	1,048.02		
74 Other Expenses	6,606.42		
Total for Charities.....	\$159,049.61		\$159,049.61
Total forward			\$1,656,974.56

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,740,204.65
8f Soldiers' Benefits	\$15,488.80		
86 State Aid			
87 Military Aid			
88 Soldiers' Burials			
89 Soldiers' Relief			
Total from Soldiers' Benefits	\$15,488.80		15,488.80
8g Schools:			
90 Tuition and Transportation of State Wards			
91 Other Tuition	\$ 9,313.85		
92 Sale of Text Books and Supplies	13.26		
93 Miscellaneous			
Vocational School	16,364.20		
School House Rents...	995.00		
School Houses	472.90		
Newsboys' Badges	18.25		
Total from Schools.....	\$27,177.46		27,177.46
8h Libraries:			
94 Fines, Rentals and Sales	\$804.13		
95 Miscellaneous			
Total from Libraries....	\$804.13		804.13
Total forward			\$2,783,675.04

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$1,656,974.56
1f Soldiers' Benefits:			
75 General Administration	\$ 2,054.50		
76 State Aid	12,084.00		
77 Military Aid	1,950.00		
78 Soldiers' Burials	694.75		
79 Soldiers' Relief	17,482.10		
German War	41,011.24		
Soldiers' Exemption ..	17.86		
Soldiers' Graves	180.75		
Total for Soldiers' Benefits	\$76,195.20		\$76,195.20
1g Schools:			
80 General Expenses			
a Administrative Salaries	\$ 3,413.33		
b Other General Salaries	382,242.34		
c Other General Expenses	576.91		
d Retirement Fund ...	11,664.41		
82 Text Books & Supplies	16,769.18		
84 Transportation	937.29		
85 Support of Truants...	1,789.87		
87 Fuel and Light.....	32,958.35		
89 New Buildings		\$150,901.72	
90 Furniture and Furnishings	554.18		
92 Other Expenses	55,673.72		
Textile School	10,004.82		
Total for Schools.....	\$516,584.40	\$150,901.72	667,486.12
1h Libraries:			
93 Salaries and Wages...	\$13,801.29		
94 Books, Periodicals, etc.	4,728.05		
95 Binding	791.28		
96 Light	772.96		
97 Buildings		\$6,055.26	
98 Other Expenses	4,387.75		
Total for Libraries.....	\$24,481.33	\$6,055.26	30,536.59
Total forward			\$2,431,192.47

AUDITOR'S REPORT.

RECEIPTS

[illegible]

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$2,431,192.47
1i Recreation:			
99 General Administration			
a Salaries and Wages.	\$ 2,654.02		
100 Parks and Gardens....			
a Salaries and Wages.	10,417.35		
b Improvements and Additions		\$ 4,551.41	
d Other Expenses	3,157.23	8,899.95	
101 Playgrounds and Gymnasias			
a Salaries and Wages.	2,552.97		
c Other Expenses	1,947.03		
103 Celebrations and Entertainments			
a Fourth of July.....	600.85		
b Labor Day	1,100.00		
c Band Concerts	583.64		
d All Other			
Soldiers' and Sailors' Celebration	2,763.52		
Board Trade, Agricultural Ex.			
Park Purposes		18,163.26	
Fairgrounds		121.16	
Total for Recreation....	\$25,776.61	\$32,735.78	\$58,512.39
Total forward			\$2,489,704.86

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,785,585.04
8j Pensions:			
100			
8k Unclassified:			
101 Receipts not Recorded under Previous Classi- fications			
a Buildings	\$ 314.82		
b Insurance	4,515.15		
Total from Unclassified..	\$4,829.97		4,829.97
Total forward			\$2,790,415.01

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$2,489,704.86
1j Pensions:			
104 Retirement made from:			
a Street Department .	\$ 1,554.11		
b Police Department .	6,513.90		
c Fire Department ...	6,141.03		
d B'dgs Department.	431.77		
e Water Works Dept..	283.00		
Total for Pensions.....	\$14,923.81		14,923.81
1k Unclassified:			
105 Damages to Persons and Personal Property ...	\$ 4,291.00		
106 Memorial Day	1,550.00		
107 City and Town Clocks.	50.00		
110 Payments not Recorded under Previous Classi fications			
a Printing City or Town Reports	317.79		
b Veteran Firemen's Association	80.00		
c Property Damages .	1,362.01		
d Revision Ordinances.	4.50		
Court Expenses	486.80		
Workingmen's Com- pensation	2,981.75		
1916 Payrolls Allowed	1,190.21		
Tax Titles—bought by City	205.99		
Total for Unclassified...	\$12,520.05		12,520.05
Total forward			\$2,517,148.72

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$2,790,415.01
9 Public Service Enterprises:			
104 Water			
a Income from Sale of Water	\$272,065.81		
b Miscellaneous			
105 All Other			
a Markets			
b Public Scales	33.70		
Total from Public Service Enterprises	\$272,099.51		272,099.51
10 Cemeteries:			
106 Sale of Lots & Graves	\$ 3,468.50		
107 Care of Lots & Graves	5,342.50		
108 Care of Endowed Lots (Interest on Funds).			
109 Miscellaneous			
Opening Graves	2,697.00		
Recording and Mis- cellaneous	248.05		
Total from Cemeteries..	\$11,756.05		11,756.05
11 Administration of Trust Funds:			
110			
111			
112			
Total forward			\$3,074,270.57

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$2,517,148.72
2 Public Service Enterprises:			
111 Electric—			
a Maintenance & Oper-			
ation			
b Construction			
112 Gas—			
a Maintenance & Oper-			
ation			
b Construction			
113 Water—			
a Maintenance & Oper-	\$179,354.76		
ation			
c Construction		\$1,252.22	
Purchase of Land...		5,680.72	
114 All Other—			
a Markets			
b Public Scales	801.00		
c Docks and Wharves.			
d Ferries			
e Herring and Alewife			
Fisheries			
f Miscellaneous			
Total for Public Service			
Enterprises	\$180,155.76	\$6,932.94	187,088.70
3 Cemeteries:			
115 Maintenance	\$14,345.78		
116 Improvements and Ad-			
ditions			
Total for Cemeteries....	\$14,345.78		14,345.78
4 Administration of Trust			
Funds:			
117			
118			
119			
Total forward			\$2,718,583.20

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Indebtedness	Total
Total forward			\$3,074,270.57
12 Interest:			
113 On Deposits	\$10,496.85		
114 On Deferred Taxes...	26,736.04		
118 On Public Trust Funds			
a Charity			
b School			
c Library	4,461.44		
Total from Interest.....	\$41,694.33		41,694.33
13 Municipal Indebtedness:			
120 Loans in Anticipation of Revenue		\$1,350,000.00	
121 Other Temp'ry Loans.			
122 Loans for General Pur- poses		780,000.00	
123 Trust Funds Used....			
124 Loans for Public Ser- vice Enterprises			
127 Premiums		7,628.76	
128 Unpaid Warrants or Orders of Current Year			
Total from Municipal In- debtedness		\$2,137,628.76	2,137,628.76
Total forward			\$5,253,593.66

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Indebtedness	Total
Total forward			\$2,718,583.20
5 Interest:			
120 On Loans in Anticipation of Revenue.....	\$ 73,996.92		
121 On Other Temporary Loans			
122 On Loans for General Purposes	121,773.20		
123 On Trust Funds Used	2,168.00		
124 On Loans for Public Service Enterprises .	59,048.75		
125 On Loans for Cemeteries	18,297.84		
Total for Interest.....	\$275,284.71		275,284.71
6 Municipal Indebtedness:			
129 Loans in Anticipation of Revenue		\$1,400,000.00	
132 Bonds and Notes from Revenue			
a General	347,341.30		
b Public Service Enterprises	47,000.00		
c Cemeteries			
Total for Municipal Indebtedness	\$394,341.30	\$1,400,000.00	1,794,341.30
Total forward			\$4,788,209.21

RECEIPTS

SOURCES OF RECEIPTS		Non- Revenue	Total
Total forward			\$5,253,593.66
14 Sinking Funds:			
From Commissioners to meet Loans for—			
129 General Purposes			
130 Public Service Enter- prises			
131 Cemeteries			
		Temporary Accounts	
15 Agency, Trust and Invest- ment Transactions:			
Trust—			
136 Perpetual Care Funds.		\$ 7,215.00	
137 Other Permanent Pub- lic Trust Funds.....			
138 Income for Investment			
139 Private Trust Funds and Accounts		1,001.00	
Total from Agency, Trust and Investment Transactions		\$8,216.00	8,216.00
Total forward			\$5,261,809.66

PAYMENTS

OBJECTS OF PAYMENTS	From Revenue	From Non- Revenue	Total
Total forward			\$4,788,209.21
7 Sinking Funds:			
To Commissioners for Debt Requirements—			
137 From Taxes, Earnings, etc.	\$30,500.00		
138 From Special Assess- ments			
139 From Sale of Real Es- tate, etc.			
Total for Sinking Funds.	\$30,500.00		30,500.00
		Temporary Accounts	
8 Agency, Trust and Invest- ment Transactions:			
Agency—			
140 Taxes			
a State		\$211,860.00	
b Non-resident Bank .		12,000.41	
c County		96,893.18	
141 Liquor Licenses Remit- ted to the State.....		36,862.25	
142 Abolition of Grade Crossings		4,677.38	
143 All Other		4.97	
Corporation Tax			
Trust—			
144 Perpetual Care Funds		7,215.00	
145 Other Permanent Pub- lic Trust Funds.....			
146 Income Invested			
147 Private Trust Funds and Accounts			
Total from Agency, Trust and Investment Transactions		\$369,513.19	369,513.19
Total forward			\$5,188,222.40

RECEIPTS

SOURCES OF RECEIPTS	Temporary Accounts and Cash Balances	Total
Total forward		\$5,261,809.66
16 Refunds:		
148 Accrued Interest	\$2,047.19	
149 All Other (Overdrafts).....	1,679.23	
Total Refunds	<u>\$3,726.42</u>	3,726.42
17 Transfers:		
150 Departmental	<u>\$70,764.88</u>	
Total Transfers	<u>\$70,764.88</u>	70,764.88
18 Balances:		
151 General		
152 Sinking Fund		
153 Investment Fund		
154 Perpetual Care Fund.....		
155 Other Public Trust Fund.....		
156 Private Trust Funds and Accounts		
Total Cash on Hand Beginning of Year		<u>314,254.24</u>
Grand Total Receipts and Cash on Hand		<u>\$5,650,555.20</u>

PAYMENTS

OBJECTS OF PAYMENTS	Temporary Accounts and Cash Balances	Total
Total forward		\$5,188,222.40
9 Refunds:		
150 Taxes—Tax Titles	\$1,021.57	
152 Special Assessments—Street Water- ing	753.78	
Total Refunds	\$1,775.35	1,775.35
10 Transfers:		
158 Departmental	\$70,764.88	
Total Transfers	\$70,764.88	70,764.88
11 Balances:		
162 Perpetual Care Fund.....		
163 Other Public Trust Fund.....		
164 Private Trust Funds and Accounts		
Total Cash on Hand End of Year....	\$389,792.57	389,792.57
Grand Total Payments and Cash on Hand		\$5,650,555.20

Insurance

Schools	\$3,448.94
C. Hall	340.75
Memorial Building	405.00
Contents Memorial Hall.....	10.50
Contents City Hall.....	24.00
Health	231.60
Street	375.10
Buildings	134.00
War Paintings—Library	36.00
Charity	235.00
Ambulance	10.55
Police	82.45
Parks (con. Buildings).....	43.20
	<hr/>
	\$5,377.09

Transfers

Com. to Treasurer.....	\$ 239.85
Claims to License Com.....	125.00
Various Depts. to Eng.....	10,192.00
Various Depts to P. Agent.....	1,504.65
Lighting to C. Hall.....	1,900.00
Various Depts. to Police.....	1,875.60
“ “ “ Fire	3,543.40
“ “ “ Buildings	5,801.06
“ “ “ Sealer	4.45
Labor Day to Waterways.....	152.80
Various Depts. to Streets.....	2,300.64
“ “ “ Charity	819.00
“ “ “ Parks	1,022.86
Restoring Con. Library to Library.....	1,585.34
Various Depts. to W. W.....	26,699.71
Water Works to Interest.....	4,260.00
Labor Day to B. of Trade.....	1,000.00
German War to State Aid.....	50,000.00
Dummer St. to Paving.....	10,359.32
Park—Varnum Ave. to Public Parks.....	548.59
Various Depts. to Health Yard.....	1,275.64
	<hr/>
	\$124,489.88

**These Municipal Transfers Deducted from
Appropriations**

Lighting to C. Hall.....	\$ 1,900.00
Health Office to Health Yard.....	500.00
Law to Police.....	1,200.00
Claims to License Com.....	125.00
German War to State Aid.....	50,000.00
	<hr/>
	53,725.00
	<hr/>
	\$ 70,764.88

Expenditures from Building Appropriation 1917

School Houses	\$28,649.90
Fire Department Buildings.....	6,647.07
Building Department Stable.....	176.95
Board of Health Stable.....	658.86
Carpenter Shop: Rep. Main.....	577.90
City Hall	1,343.26
City Hospital	2,999.53
City Stables	609.71
Lighting Station	128.03
Memorial Building	1,007.06
Police Station Stable.....	1,285.75
Rifle Range	436.76
Coffin Construction	613.28
Comfort Station	104.09
Office Supplies	734.36
Inspector Buildings	1,999.90
Clerical Work	1,965.98
Elevator Inspector	1,140.75
Gas Piping Inspector.....	1,227.90
Transportation	8,999.70
Janitors—Police Station	2,715.00
Janitor—Memorial Hall	870.00
Pensions	431.77
Deputy Inspector Buildings.....	1,503.48
Tools	609.98
Stock, etc.	1,847.64
General Expenses	3,808.83
<hr/>	
Total	\$73,093.44

FINANCIAL STATEMENT

OF THE

CITY OF LOWELL, MASS.

APPROPRIATIONS

CASH

TRANSFERS

PAYMENTS

FROM JANUARY 1, 1917 TO DECEMBER 31, 1917

REVENUE—APPROPRIATIONS, RECEIPTS AND PAYMENTS

1—Commissioner of Public Safety

No.	Revenue Accounts	Expenditure	Unexpended	Bal. from 1916	Appropriated from Revenue	Transfers	Cash Receipts	Total Appropriation
1- 1	Mayor	\$ 4,500.50			\$ 4,500.50			\$ 4,500.50
3- 3	Smoke Inspection	333.73	\$ 1.27		335.00			335.00
2- 8	Fish & Game Wardens	150.00			150.00			150.00
2- 9	Pound Keeper	5.00			5.00			5.00
3- 5	Animal Inspector	507.00	3.00		510.00			510.00
✓ 5- 1	Charity	119,218.74			118,360.74	\$ 819.00	\$ 39.00	119,218.74
3- 9	Automobile Ambulance Service		369.00	369.00				369.00
✓ 5- 2	Mothers with Dependent Children	40,649.87	.13		40,650.00			40,650.00
3- 1	Health Office	27,587.86			27,577.36		10.50	27,587.86
3- 2	Health Yard	72,587.10			71,311.46	1,275.64		72,587.10
3- 6	Milk Inspection	3,352.23	647.77		4,000.00		35.15	4,000.00
1- 7	Law	4,709.65	115.50		4,790.00			4,825.15
2- 1	Police	184,477.32			182,601.72	1,875.60		184,477.32
✓ 6- 1	State Aid	75,996.59	10,982.62		36,000.00	50,000.00	979.21	86,979.21
1-14	Insurance	5,377.09	11.91		5,300.00		89.00	5,389.00
3- 4	School Inspection	800.00			800.00			800.00
8- 5	Band Concerts	583.64	16.36		600.00			600.00
14- 2	Revision Ordinances	4.50	495.50		500.00			500.00
2-12	Police Wires	1,268.44	431.56		1,700.00			1,700.00
2-13	Waterways Safety Fencing	1,982.74	.06		1,830.00	152.80		1,982.80
6- 5	Soldiers' Graves	180.75	169.25		350.00			350.00
3-10	Purchase and Acquiring Land — Contagious Hospital	2,800.00			2,800.00			2,800.00
Total	.....	\$547,072.75	\$13,243.93	\$369.00	\$504,671.78	\$54,123.04	\$1,152.86	\$560,316.68

2—Commissioner of Finance

1- 3 Auditor	\$ 6,301.64			\$ 6,301.64		\$ 6,301.64
1- 4 Treasurer	15,725.80			15,500.00		15,739.85
1- 8 City Clerk	9,544.63			9,544.63		9,544.63
1-11 Elections & Registrars	20,627.77			20,627.77		20,627.77
1-12 Purchasing Agent	8,897.88		406.77	7,800.00		9,304.65
1- 5 Assessors	15,996.32			15,996.32		15,996.32
14- 3 Auditing City Books..	1,296.00		4.00	1,300.00		1,300.00
Total	\$78,390.04		\$424.82	\$77,070.36		\$78,814.86

3—Commissioner Streets and Highways

4- 1 Street Maintenance ...	\$172,284.57			\$170,000.00		\$172,303.89
4- 2 Sprinkling Streets ...	26,938.91		\$ 19.32	27,000.00		27,000.00
4- 4 Pensions	1,554.11		61.09	1,600.00		1,600.00
3- 8 Sewer Maintenance ...	15,977.04		45.89	16,000.00		16,000.00
1-10 Engineering	17,152.64		22.96	7,000.00		17,192.00
4- 3 Street Lighting	120,718.64		39.36	121,100.00		121,100.00
			381.36			
Total	\$354,625.91		\$569.98	\$342,700.00		\$355,195.89

REVENUE—APPROPRIATIONS, RECEIPTS AND PAYMENTS (Continued)

4—Commissioner of Fire and Water

No.	Revenue Accounts	Expenditure	Unexpended	Bal. from 1916	Appropriated from Revenue	Transfers	Cash Receipts	Total Appropriation
2- 2	Fire	\$219,969.87	\$1,633.14	\$ 3,500.00	\$218,000.00	\$ 3,543.40	\$ 59.61	\$221,603.01
2-17	Ladder Truck Chassis.	3,500.00						3,500.00
10- 1	Water Works	312,386.22	1,941.75	13,562.45		26,699.71	274,065.81	314,327.97
2-14	Fire Alarm Boxes (key-less doors)	875.00			875.00			875.00
2-15	Fire—Triple Combination		6,000.00		6,000.00			6,000.00
2-16	Fire—Repairing Auto Truck	678.00			678.00			678.00
	Total	\$537,409.09	\$9,574.89	\$17,062.45	\$225,553.00	\$30,243.11	\$274,125.42	\$546,983.98

5—Commissioner of Public Property and Licenses

2- 4	Buildings	\$ 73,093.44	\$ 37.62		\$ 68,000.00	\$5,081.06	\$50.00	\$ 73,131.06
1- 9	Messenger	1,535.63			1,535.63			1,535.63
1-13	City Hall	22,030.27			20,130.27	1,900.00		22,030.27
2- 7	Moths	7,488.93	11.07		7,500.00			7,500.00
2- 3	Rifle Range	1,194.70	.30		1,195.00			1,195.00
2- 6	Sealer	4,038.01	2.44		4,036.00	4.45		4,040.45
2-10	Weigher	801.00	9.00		810.00			810.00
2- 5	Wires	2,679.86	.14		2,680.00			2,680.00
1- 6	License Commission ..	4,106.98	48.02		4,030.00	125.00		4,155.00
3- 7	Comfort Station	6,192.86	7.14		6,200.00			6,200.00
2-11	City Hall Safes.....	366.87		\$366.87				366.87
	Total	\$123,528.55	\$115.73	\$366.87	\$116,116.90	\$7,110.51	\$50.00	\$123,644.28

6—Park Commissioners

8- 1 Parks	\$16,019.56	\$291.30	\$15,270.00	\$1,022.86	\$18.00	\$16,310.86
8- 2 Street Trees, Shedd Park, No. and So. Commons, New Auto Truck, Lucy Larcom Park	5,024.30 4,300.00		5,024.30 4,300.00			5,024.30 4,300.00
8-11 Playgrounds						
8-12 Soldiers' and Sailors' Celebration	2,763.52	266.48	3,000.00		30.00	3,030.00
8-13 B. of Trade Agricultural Exhibition	1,000.00			1,000.00		1,000.00
Total	\$29,107.38	\$557.78	\$27,594.30	\$2,022.86	\$48.00	\$29,665.16

7—School Department

7- 1 Schools	\$467,085.31		\$467,063.49		\$21.82	\$467,085.31
7- 2 Vocational School	39,494.27		39,493.39		.88	39,494.27
7- 3 Textile School	10,004.82		10,004.82			10,004.82
Total	\$516,584.40		\$516,561.70		\$22.70	\$516,584.40

REVENUE—APPROPRIATIONS, RECEIPTS AND PAYMENTS (Continued)

8—Municipal Council

No.	Revenue Accounts	Expenditure	Unexpended	Bal. from 1916	Appropriated from Revenue	Transfers	Cash Receipts	Total Appropriation
1- 2	Commissioners	\$14,843.70			\$14,841.70		\$2.00	\$14,843.70
8- 6	Memorial Day, G. A. R.	1,000.00			1,000.00			1,000.00
8- 7	Memorial Day, S. W. V.	400.00			400.00			400.00
8- 8	Memorial Day, S. of V.	150.00			150.00			150.00
14- 1	Claims	9,623.16	\$ 251.84		9,875.00			9,875.00
13- 4	Liquor Licenses	36,862.25			36,862.25			36,862.25
8- 4	Labor Day	1,100.00	100.00		1,200.00			1,200.00
8- 3	July 4th	600.85	24.15		625.00			625.00
8-10	Veteran Firemen's Ass.	80.00	20.00		100.00			100.00
14- 4	Workingmen's Compensation Act	2,981.75	2,018.25		5,000.00			5,000.00
	Total	\$67,641.71	\$2,414.24		\$70,053.95		\$2.00	\$70,055.95

9—Library Trustees

9- 1	Library	\$24,368.16			\$17,687.02	\$1,585.34	\$5,095.80	\$24,368.16
9- 2	Restoring Portraits, Memorial Hall, L'ary	113.17	\$ 6.83	\$ 120.00				120.00
9- 3	Reconstruction Library, Memorial Hall	6,055.26	452.19	6,507.45				6,507.45
9- 4	Restoring Contents, Library, Memorial Hall	1,585.34		1,585.34				1,585.34
	Total	\$32,121.93	\$459.02	\$8,212.79	\$17,687.02	\$1,585.34	\$5,095.80	\$32,580.95

REVENUE—APPROPRIATIONS, RECEIPTS AND PAYMENTS (Continued)

11—Cemeteries			
11- 1 Cemeteries	\$14,345.78	\$2,319.24	\$4,908.97
12—Fixed Charges			
12- 1 Interest, Interest Tax			
Loans	\$202,198.12		
12- 2 City Debt	347,341.30	\$2,054.86	\$4,260.00
12- 3 Sinking Funds	30,500.00		
Total	\$580,039.42	\$2,054.86	\$4,260.00
13—Agency, Trust, Investments, Transactions			
13- 1 State Tax	\$211,860.00	\$211,860.00	\$211,860.00
13- 2 National Bank Tax...	12,000.41	12,000.41	12,000.41
13- 3 County Tax	96,893.18	96,893.18	96,893.18
13- 5 Grade Crossings	4,677.38	4,677.38	4,677.38
13- 6 State Highway Tax...	1,325.00	1,325.00	1,325.00
13- 8 Soldier's Exemption ..	17.86	17.86	17.86
13- 7 Corporation Tax	4.97	4.97	4.97
Total	\$326,778.80	\$326,778.80	\$326,778.80

NON-REVENUE—APPROPRIATIONS, RECEIPTS AND PAYMENTS

1—Commissioner Public Safety

No.	Non-Revenue Accounts	Expenditure	Unexpended	Bal. from 1916	Appropriated from Loans	Transfers	Cash Receipts	Total Appropriation
N 3-2	Isolation Hospital ..	\$148,069.45	\$72,587.42	\$45,656.87	\$175,000.00			\$220,656.87
N 3-3	Isolation H'tal Equip- ment and Furnishings		24,000.00		24,000.00			24,000.00
	Total	\$148,069.45	\$96,587.42	\$45,656.87	\$199,000.00			\$244,656.87

3—Commissioner of Streets and Highways

N 3-1	Sewer Construction ..	\$ 71,140.34	\$ 6,531.74	\$ 2,653.80	\$ 75,000.00		\$ 18.28	\$ 77,672.08
N 4-1	Paving	77,047.23	6,676.93	22,289.16	50,000.00	\$10,359.32	1,075.68	83,724.16
N 4-3	New Sidewalks	9,941.41	325.49	4.56	10,000.00		262.34	10,266.90
N 4-4	Wedge & Porter Sts..		.10	.10				.10
N 4-5	Paving and Widening Lawrence St., Wid- ening Rogers St...		1,444.44	1,444.44				1,444.44
N 4-2	Macadamizing	70,879.22	928.53	40.75	70,000.00			71,807.75
N 4-6	Pawtucket Falls B'ge	47,450.00	2,501.80	25,951.80	24,000.00		1,767.00	49,951.80
N 4-7	Extens'n Dummer St.	11,625.19		11,151.28	473.91			11,625.19
N 4-8	Widening School and Mammoth Road ..	3,793.57	3,062.74	6,856.31				6,856.31
N 4-9	Sale Buildings, Dummer St.	125.00	152.30	277.30				277.30
	Total	\$292,001.96	\$21,624.07	\$70,669.50	\$229,473.91	\$10,359.32	\$3,123.30	\$313,626.03

7—School Department

N 7-1 Acquiring Land and Cons't'g H. School.	\$ 16,936.16	\$ 76,927.83	\$ 18,863.99	\$ 75,000.00	\$ 93,863.99
N 7-2 Acquiring Land and Construct'g Schools.	126,278.83	105,365.38	51,193.21	180,000.00	231,644.21
N 7-3 School House Repairs (State Police)	7,686.73	179.68	7,866.41		7,866.41
Total	\$150,901.72	\$182,472.89	\$77,923.61	\$255,000.00	\$333,374.61

8—Recreation

N 8-3 Land for Public P'ks	\$ 5,100.00	\$ 1,252.12	\$ 5,803.53	\$548.59	\$ 6,352.12
N 8-2 Chambers St. Playg'd	6,107.55	892.45	7,000.00		7,000.00
N 8-4 Park Purposes	18,163.26	2,371.74	20,000.00		20,000.00
N 8-5 Fairgrounds—Park ..	121.16	19,878.84		\$20,000.00	20,535.00
Total	\$29,491.97	\$24,395.15	\$32,803.53	\$20,000.00	\$535.00
				\$548.59	\$53,887.12

10—Commissioner Fire and Water

N 10-1 Purifying and Con- struct'g Water Sys'm	\$1,252.22	\$2,308.80		\$3,561.02	\$ 3,561.02
N 10-2 Purchase of Land...	5,680.72	4,870.51	\$10,551.23		10,551.23
Total	\$6,932.94	\$7,179.31	\$10,551.23	\$3,561.02	\$14,112.25

14—Unclassified

N 14-1 Municipal Purposes.		\$394.16	\$394.16		\$394.16
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RECAPITULATION

	Revenue Account					Appropriated from Loans	Transfers	Cash Receipts	Total Appropriation
	Expenditure	Unexpended	Balance from 1916	Appropriated from Revenue					
Public Safety	\$ 547,072.75	\$13,243.93	\$ 369.00	\$ 504,671.78		\$ 54,123.04	\$ 1,152.86	\$ 560,316.68	
Finance	78,390.04	424.82		77,070.36		1,744.50		78,814.86	
Streets and Highways...	354,625.91	569.98		342,700.00		12,492.61	3.28	355,195.89	
Fire and Water.....	537,409.09	9,574.89	17,062.45	225,553.00		30,243.11	274,125.42	546,983.98	
Public Property and Licenses	123,528.55	115.73	366.87	116,116.90		7,110.51	50.00	123,644.28	
Park Commissioners ...	29,107.38	557.78		27,594.30		2,022.86	48.00	29,665.16	
Schools	516,584.40			516,561.70			22.70	516,584.40	
Municipal Council	67,641.71	2,414.24		70,053.95			2.00	70,055.95	
Library Trustees	32,121.93	459.02	8,212.79	17,687.02		1,585.34	5,095.80	32,580.95	
Fixed Charges	580,039.42	2,054.86		577,834.28		4,260.00		582,094.28	
Cemeteries	14,345.78	2,319.24	4,908.97				11,756.05	16,665.02	
Agency, Trust, Investments, Transactions ..	326,778.80			326,778.80				326,778.80	
Total	\$3,207,645.76	\$31,734.49	\$30,920.08	\$2,802,622.09		\$113,581.97	\$292,256.11	\$3,239,380.25	
Non-Revenue Account									
Public Safety	\$148,069.45	\$ 96,587.42	\$ 45,656.87			\$199,000.00		\$244,656.87	
Streets and Highways..	292,001.96	21,624.07	70,669.50			229,473.91	\$3,123.30	313,626.03	
Schools	150,901.72	182,472.89	77,923.61			255,000.00	451.00	333,374.61	
Recreation	29,491.97	24,395.15	32,803.53			20,000.00	535.00	53,887.12	
Fire and Water.....	6,932.94	7,179.31	10,551.23			3,561.02		14,112.25	
Unclassified		394.16	394.16					394.16	
Total	\$627,398.04	\$332,653.00	\$237,998.90			\$707,034.93	\$4,109.30	\$960,051.04	

CLASSIFICATION OF
EXPENSES
REVENUE

DEPARTMENTAL

MAYOR'S DEPARTMENT

Appropriation	\$4,500.50	
	<hr/>	\$4,500.50
Expended		
Salaries:		
To James E. O'Donnell, Commissioner		
Public Safety	\$3,000.00	
James Hearn, Secretary.....	1,200.00	
Other Expenses:		
For Office Supplies.....	20.55	
Printing, Binding, etc.....	71.00	
Telephone	16.78	
Transfers	36.00	
Transportation	102.00	
All Other	54.17	
	<hr/>	4,500.50

OTHER COMMISSIONERS

Appropriation	\$14,843.70	
	<hr/>	\$14,843.70
Expended		
Salaries:		
To George H. Brown, Commissioner of		
Water Works and Fire Protection	\$2,500.00	
James E. Donnelly, Commissioner of		
Finance	2,500.00	
Charles J. Morse, Commissioner of		
Streets and Highways.....	2,500.00	
Francis A. Warnock, Commissioner		
of Public Property and Licenses..	2,500.00	
Other Expenses:		
For Advertising	130.19	
Catering	131.00	
Decorating	95.00	
Office Supplies	301.57	
Printing, Binding, etc.....	2,090.26	
Registrar of Labor (salary).....	418.50	
Safety Deposit Boxes.....	90.00	
Transportation	137.96	
Transportation	1,128.40	
All Other	320.82	
	<hr/>	\$14,843.70

AUDITING DEPARTMENT

Appropriation	\$6,301.64	
	<hr/>	\$6,301.64
Expended		
Salaries:		
To Charles D. Paige, Auditor.....	\$2,500.00	
Clerks	2,550.00	
Other Expenses:		
For Office Supplies.....	180.46	
Printing, Binding, etc.....	798.00	
Transfers	17.00	
All Other	256.18	
	<hr/>	\$6,301.64

TREASURER AND COLLECTOR'S DEPARTMENT

Appropriation	\$15,739.85	
	<hr/>	\$15,739.85
Expended		
Salaries and Wages:		
To Andrew G. Stiles, Treasurer and Col- lector	\$ 373.00	
Fred H. Rourke, Treasurer and Col- lector	2,571.16	
Clerks	8,539.87	
Writing and Distributing Tax Bills..	485.00	
Other Expenses:		
For Advertising	198.27	
Office Supplies	1,980.66	
Premiums on Bonds.....	670.00	
Printing, Binding, etc.....	581.56	
Telephone	23.49	
Transportation	57.80	
Transfers	5.60	
All Other	239.39	
	<hr/>	15,725.80
Returned to Treasury.....		14.05
		<hr/>
		\$15,739.85

ASSESSORS' DEPARTMENT

Appropriation	\$15,996.32	
	<hr/>	\$15,996.32

Expended

Salaries and Wages:

To Albert J. Blazon, Assessor.....	\$2,250.00
Daniel E. Hogan, Assessor.....	2,250.00
Jeremiah J. O'Sullivan, Assessor....	2,250.00
Permanent Clerks	3,513.75
Temporary Clerks	2,895.00
Assistant Assessors	1,291.50

Other Expenses:

For Auto List	\$ 40.00
Office Supplies	102.63
Printing, Binding, etc.....	1,190.62
Transfers	10.00
Transportation	81.75
All Other	121.07

\$15,996.32
LICENSE COMMISSIONERS

Appropriation	\$4,155.00	
	<hr/>	\$4,155.00

Expended

Salaries:

To T. P. Boulger, }	750.00
C. H. Hanson, } License Comm'ers..	800.00
Geo. E. Putnam, }	750.00
Clerk	1,500.00

Other Expenses:

For Office Supplies.....	85.25
Printing, Binding, etc.....	108.32
Services	40.50
Telephone	7.22
All Other	65.69

4,106.98

Returned to Treasury.....

48.02

\$4,155.00

LAW DEPARTMENT

Appropriation	\$4,825.15	
	<hr/>	\$4,825.15
Expended		
Salaries:		
To Harold A. Varnum, City Solicitor...	\$ 250.00	
William D. Regan, City Solicitor....	2,664.38	
Clerk	1,000.00	
Other Expenses:		
For Books and Binding.....	253.11	
Office Supplies and Printing.....	136.58	
Telephone	34.64	
Transfers	17.00	
All Other	353.94	
	<hr/>	4,709.65
Returned to Treasury.....		115.50
		<hr/>
		\$4,825.15
		<hr/>

CITY CLERK'S DEPARTMENT

Appropriation	\$9,544.63	
	<hr/>	\$9,544.63
Expended		
Salaries and Wages:		
To Stephen Flynn, City Clerk.....	\$2,550.00	
William P. McCarthy, Assistant City		
Clerk	2,000.00	
Clerks	3,397.96	
Other Expenses:		
For Advertising	\$ 7.16	
Birth Returns	1,047.55	
Office Supplies, Printing, etc.....	447.56	
Telephone	10.52	
All Other	83.88	
	<hr/>	\$9,544.63
		<hr/>

CITY MESSENGER'S DEPARTMENT

Appropriation	\$1,535.63	
	<hr/>	\$1,535.63
Expended		
Salary:		
To Owen A. Monahan.....	\$1,400.00	
Other Expenses:		
For Office Supplies, Printing, etc.....	95.09	
Telephone	17.13	
Transfers	18.00	
All Other	5.41	
	<hr/>	\$1,535.63
		<hr/>

ENGINEERING DEPARTMENT

Appropriation	\$17,192.00	
	<hr/>	\$17,192.00
Expended		
Salaries and Wages:		
To Stephen Kearney, City Engineer.....	\$ 2,700.00	
Clerk	899.41	
All Other Service.....	12,957.96	
Other Expenses:		
For Instruments, etc.....	135.54	
Office Supplies, Printing, etc.....	342.59	
Telephone	16.63	
Transfers	5.15	
All Other	95.36	
	<hr/>	17,152.64
Returned to Treasury.....		39.36
		<hr/>
		\$17,192.00
		<hr/>

ELECTIONS AND REGISTRATION

Appropriation	\$20,627.77	
	<hr/>	\$20,627.77
	Expended	
Salaries and Wages:		
To H. C. McOsker, }	\$ 800.00	
J. O. Allard, } Registrars of Voters	750.00	
Francis M. Qua, }	750.00	
Registrars' Assistants	2,058.00	
Precinct Officers	8,398.00	
Police Service	66.00	
Labor	2,385.98	
All Other	862.00	
Other Expenses:		
For Advertising	334.42	
Binding	67.50	
Boxes and Repairs.....	141.00	
Fuel	214.70	
Lighting	5.34	
Office and Election Supplies.....	166.82	
Printing	2,043.45	
Roofing Paper	175.00	
Telephone	62.72	
Teaming	696.10	
Transfers	10.95	
Miscellaneous and Printing.....	639.79	
	<hr/>	\$20,627.77

PURCHASING DEPARTMENT

Appropriation	\$9,304.65	
	<hr/>	\$9,304.65
	Expended	
Salaries:		
To Edward H. Foye, Purchasing Agent..	980.60	
Maxime Lepine, Purchasing Agent,..	2,150.13	
Inspectors	2,020.18	
Clerks	2,035.00	
Other Expenses:		
For Automobile Supplies and Repairs...	348.12	
Advertising	74.84	
Office Supplies, Printing, etc.....	1,230.25	
Telephone	13.69	
All Other	45.07	
	<hr/>	\$8,897.88
Returned to Treasury.....		406.77
		<hr/>
		\$9,304.65

CITY HALL DEPARTMENT

Appropriation	\$22,030.27	
	<hr/>	\$22,030.27

Expended

Wages:		
To Janitors	2,883.85	
Engineers and Firemen.....	4,202.84	
Elevator Service	894.90	
Matrons	3,534.75	
All Other	148.50	
Other Expenses:		
For Fuel and Light.....	8,106.84	
Furniture and Fittings.....	109.60	
Janitors' Supplies	547.64	
Laundry	63.98	
Transfer	600.60	
Water	386.54	
All Other	550.23	
	<hr/>	\$22,030.27
		<hr/>

INSURANCE

Appropriation	\$5,389.00	
	<hr/>	\$5,389.00
		<hr/>

Expended

To Various Persons and Firms.....	\$5,377.09	
	<hr/>	5,377.09
Returned to Treasury.....		11.91
		<hr/>
		\$5,389.00
		<hr/>

REVENUE

PROTECTION PERSONS
AND PROPERTY

POLICE DEPARTMENT

Appropriation	\$184,477.32	
	<hr/>	\$184,477.32

Expended**Salaries and Wages:**

To Redmond Welch, Chief of Police.....	\$ 2,400.00
Captains, Lieutenants, Sergeants and	
Inspectors	19,080.09
Patrolmen	138,139.90
All Other Service.....	11,251.73

Pensions:

To Various Persons.....	6,513.90
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Horses and Care of Same:

For Hay, Grain, etc.....	413.48
Shoeing	88.25
Stable Supplies	69.35

Fuel and Light:

For Coal and Wood.....	1,433.20
Gas and Electricity.....	663.06

Other Expenses:

For Auto Care and Supplies.....	1,606.02
Disability Allowance	709.00
Electrical Equipment	394.53
Equipment for Men.....	49.23
Janitors' Supplies	103.39
Office Supplies, Printing, etc.....	558.93
Prisoners' Care and Expenses.....	47.03
Telephone	110.67
Transfers	92.80
Water	196.69
All Other	555.17

	<hr/>	\$184,477.32
	<hr/>	

FIRE DEPARTMENT

Appropriation	\$221,603.01	
		\$221,603.01
Expended		
Salaries and Wages:		
To Edward F. Saunders, Chief Engineer	\$ 2,500.00	
Firemen, Electrician, Linemen and		
Clerk	168,325.88	
Call Men	5,355.74	
Pensions:		
To Various Persons.....	6,141.03	
Horses and Care of Same:		
For Hay, Grain, Straw, etc.....	8,282.41	
Stable Supplies, Harnesses, etc.....	680.83	
Shoeing	1,109.17	
All Other	114.00	
Equipment and Repairs:		
For Hose and Fittings.....	2,469.08	
Hardware and Repairs.....	1,772.37	
All Other	2,542.83	
Fuel and Light:		
For Coal and Wood.....	4,112.88	
Gas and Electricity.....	2,124.93	
Maintenance of Buildings and Grounds:		
For Furniture and Furnishings.....	501.37	
Laundry	854.61	
All Other	206.81	
Other Expenses:		
For Automobile Repairs and Supplies...	9,444.06	
Chemicals	389.72	
Fire Alarm Boxes.....	671.34	
Insurance	743.50	
Office Supplies and Printing.....	324.48	
Soft Soap	138.45	
Telephone	384.41	
Transfers	14.62	
Water	507.48	
All Other	257.87	
		\$219,969.87
Balance to 1918.....		1,633.14
		<u>\$221,603.01</u>

RIFLE RANGE

Appropriation	\$1,195.00	
	<hr/>	<hr/>
		\$1,195.00

Expended

Salaries:		
To Raymond Eastman, Keeper.....	\$883.00	
Other Expenses:		
For Fuel	30.00	
Targets and Posters.....	32.50	
Telephone	45.90	
Transportation	21.00	
Transfers	41.26	
All Other	141.04	
	<hr/>	1,194.70
Returned to Treasury.....		.30
		<hr/>
		\$1,195.00
		<hr/>

INSPECTION WIRES

Appropriation	\$2,680.00	
	<hr/>	<hr/>
		\$2,680.00

Expended

Salaries and Wages:		
To Wm. H. Mahan, Inspector Wires.....	\$1,600.00	
Clerks	927.20	
Other Expenses:		
For Office Supplies, Printing, etc.....	63.95	
Telephone	7.30	
Transportation	60.00	
Transfers	11.00	
All Other	10.41	
	<hr/>	\$2,679.86
Returned to Treasury .....		.14
		<hr/>
		\$2,680.00
		<hr/>

INSPECTION BUILDINGS

Appropriation	\$73,131.06	
	<hr/>	\$73,131.06
Expended		
Salaries and Wages:		
To Francis A. Connor, Inspector Public		
Buildings	\$ 1,999.90	
Clerical Service	1,965.98	
All Other	38,790.44	
Other Expenses:		
For Automobile Supplies and Repairs...	3,003.32	
Coffin Supplies	172.52	
Electrical Supplies	295.85	
Fuel, Light, Power, etc.....	642.76	
Hardware	2,139.36	
Hay, Grain, etc.....	479.30	
Harnesses, Stable Supplies, etc....	495.25	
Lumber	5,151.74	
Mason Work and Supplies.....	1,840.15	
Office Supplies, Printing, etc.....	667.52	
Paints, Oils, etc.....	4,234.01	
Pensions	431.77	
Pipe and Fittings Heating, etc.....	8,365.04	
Roofing	718.09	
Shoeing	127.15	
Telephone	20.70	
Transfers	12.00	
All Other	1,540.59	
	<hr/>	73,093.44
Returned to General Treasury.....		37.62
		<hr/>
		\$73,131.06
		<hr/>

SEALER OF WEIGHTS AND MEASURES

Appropriation	\$4,040.45	
	<hr/>	\$4,040.45
Expended		
Salaries and Wages:		
To Warren P. Riordan.....	\$1,200.00	
Deputies	2,086.68	
Other Expenses:		
For Advertising	22.00	
Equipment	138.39	
Office Supplies, Printing, etc.....	104.64	
Transfers	274.70	
All Other	211.60	
	<hr/>	\$4,038.01
Returned to Treasury.....		2.44
		<hr/>
		\$4,040.45
		<hr/>

FORESTRY—MOTH EXTERMINATION

Appropriation	\$7,500.00	
	<hr/>	\$7,500.00
Expended		
Salaries and Wages:		
To John G. Gordon, Supt.....	\$1,058.25	
Clerk	415.00	
Labor	4,308.92	
Other Expenses:		
For Arsenate of Lead.....	815.00	
Equipments and Repairs, Hardware, etc.	133.49	
Office Supplies, Printing, etc.....	62.01	
Transportation	86.15	
Transfers	58.08	
Teaming, Horse Hire, etc.....	460.08	
All Other	91.95	
	<hr/>	7,488.93
Returned to Treasury.....		11.07
		<hr/>
		\$7,500.00

FISH AND GAME WARDENS

Appropriation	\$150.00	
	<hr/>	\$150.00

Expended

Salaries:		
To Harry Gonzales.....	\$100.00	
Elmer H. Houghton.....	50.00	
	<hr/>	\$150.00

POUND KEEPER

Appropriation	\$5.00	
	<hr/>	\$5.00

Expended

Salary:		
To Orville W. Peabody.....	\$5.00	
	<hr/>	\$5.00

CITY WEIGHER

Appropriation	\$810.00	
	<hr/>	\$810.00

Expended

Salary:		
To Geo. F. Noonan.....	\$800.00	
Other Expenses:		
For Transfers	1.00	
	<hr/>	801.00
Returned to Treasury.....		9.00
		<hr/>
		\$810.00

CITY HALL SAFES

Appropriation	\$366.87	
	<hr/>	\$366.87

Expended

Other Expenses:		
For Steel Filing Cases.....	\$366.00	
Transfers .....	.87	
	<hr/>	\$366.87

POLICE—WIRES

Appropriation	\$1,700.00	
	<hr/>	\$1,700.00
Expended		
Salaries and Wages:		
To Labor	\$ 154.00	
Other Expenses:		
For Cable, Junction Boxes, etc.....	1,085.70	
Transfers	11.86	
All Other	16.88	
	<hr/>	1,268.44
Returned to Treasury.....		431.56
		<hr/>
		\$1,700.00
		<hr/>

WATERWAYS—SAFETY FENCING

Appropriation	\$1,982.80	
	<hr/>	\$1,982.80
Expended		
Salaries and Labor:		
To Labor	\$ 483.00	
Other Expenses:		
For Office Supplies, Printing, etc.....	56.54	
Life Saving Apparatus.....	1,003.12	
Transfers	8.43	
All Other	431.65	
	<hr/>	1,982.74
Returned to Treasury.....		.06
		<hr/>
		\$1,982.80
		<hr/>

FIRE ALARM BOXES (KEYLESS DOORS)

Appropriation	\$875.00	
	<hr/>	\$875.00
Expended		
Other Expenses:		
For Equipment	\$875.00	
	<hr/>	\$875.00
		<hr/>

FIRE—TRIPLE COMBINATION

Appropriation	\$6,000.00	
	<hr/>	\$6,000.00
	Expended	
Balance to 1918.....	\$6,000.00	
	<hr/>	\$6,000.00
		<hr/>

FIRE—REPAIRING LADDER TRUCK

Appropriation	\$678.00	
	<hr/>	\$678.00
	Expended	
Other Expenses:		
For Repairing Ladder Truck.....	\$678.00	
	<hr/>	\$678.00
		<hr/>

AUTOMOBILE LADDER TRUCK CHASSIS

Appropriation	\$3,500.00	
	<hr/>	\$3,500.00
	Expended	
Other Expenses:		
For Transfers	\$3,500.00	
	<hr/>	\$3,500.00
		<hr/>

REVENUE

HEALTH AND SANITATION

HEALTH OFFICE

Appropriation	\$27,587.86	
	<hr/>	\$27,587.86
Expended		
Salaries and Labor:		
To P. Brunelle, }		
T. F. Carroll, } Board of Health.....	\$1,500.00	
J. E. Drury, }		
Frederick A. Bates, Agent.....	1,830.00	
Thos. B. Smith, Bacteriologist.....	623.93	
Marshall L. Alling, Bacteriologist...	376.07	
Clement A. Hamblett, Meat Inspector	939.00	
Registrar	842.00	
Nurse	782.50	
All Other	7,058.41	
Other Expenses:		
For Board and Treatment.....	8,681.97	
Dry Goods, Clothing, etc.....	45.38	
Drugs and Medicines.....	365.87	
Groceries and Provisions.....	1,368.68	
Laboratory Supplies	278.78	
Medical Attendance	496.40	
Office Supplies, Printing, etc.....	607.62	
Telephone	16.24	
Transportation	670.15	
Transfers	850.90	
All Other	253.96	
	<hr/>	\$27,587.86

REFUSE AND GARBAGE

Appropriation	\$72,587.10	
	<hr/>	\$72,587.10
Expended		
Salaries and Wages:		
To Labor	\$55,759.40	
Other Expenses:		
For Hardware, Blacksmiths' Supplies,		
etc.	1,664.56	
Harnesses, Stable Supplies, etc....	738.97	
Hay, Grain, etc.....	11,312.66	
Horses, Hire Horses, Teaming, etc...	2,039.50	
Laundry	262.50	
Lighting	163.39	
Water	152.39	
Veterinary Service	57.50	
All Other	436.23	
	<hr/>	\$72,587.10

SMOKE INSPECTION

Appropriation	\$335.00	
	<hr/>	\$335.00
Expended		
Salary:		
To Charles J. Riley, Smoke Inspector....	\$300.00	
Other Expenses:		
For Office Supplies, Printing, etc.....	4.00	
Transportation	20.00	
Transfers	3.00	
All Other	6.73	
	<hr/>	333.73
Returned to Treasury.....		1.27
		<hr/>
		\$335.00
		<hr/>

INSPECTION SCHOOL CHILDREN

Appropriation	\$800.00	
	<hr/>	\$800.00
Expended		
Salaries:		
To Various Physicians.....	\$800.00	
	<hr/>	\$800.00
		<hr/>

INSPECTION ANIMALS

Appropriation	\$510.00	
	<hr/>	\$510.00
Expended		
Salary:		
To Walter A. Sherman, Inspector of Ani-		
mals	\$500.00	
Other Expenses:		
For Office Supplies and Printing.....	7.00	
	<hr/>	507.00
Returned to Treasury.....		3.00
		<hr/>
		\$510.00
		<hr/>

INSPECTION MILK AND VINEGAR

Appropriation	\$4,000.00	
	<hr/>	\$4,000.00
Expended		
Salaries and Wages:		
To Melvin F. Master, Inspector Milk and		
Vinegar	\$1,516.70	
Collector	903.08	
Other Expenses:		
For Chemical Equipment and Supplies..	375.35	
Office Supplies and Printing.....	229.62	
Telephone	63.31	
Traveling Expenses	127.77	
Transfers	26.00	
All Other	110.40	
	<hr/>	3,352.23
Returned to Treasury.....		647.77
		<hr/>
		\$4,000.00

COMFORT STATION

Appropriation	\$6,200.00	
	<hr/>	\$6,200.00
Expended		
Salaries and Wages:		
To Labor	\$4,855.87	
Other Expenses:		
For Janitors' Supplies.....	304.71	
Lighting and Fuel.....	431.55	
Water	429.52	
All Other	171.21	
	<hr/>	6,192.86
Returned to Treasury.....		7.14
		<hr/>
		\$6,200.00

SEWER MAINTENANCE

Appropriation	\$16,000.00	
	<hr/>	\$16,000.00
Expended		
Salaries and Wages:		
To Labor	\$13,627.71	
Other Expenses:		
For Equipment, Hardware, etc.....	189.72	
Fuel and Light.....	148.43	
Hay, Grain, etc.....	1,879.64	
Transfers .....	.65	
All Other	130.89	
	<hr/>	15,977.04
Returned to Treasury.....		22.96
		<hr/>
		\$16,000.00
		<hr/>

AUTOMOBILE AMBULANCE AND SERVICE

Appropriation	\$369.00	
	<hr/>	\$369.00
Expended		
Returned to Treasury.....	\$369.00	
	<hr/>	\$369.00
		<hr/>

**PURCHASE AND ACQUIRING LAND CONTAGIOUS
HOSPITAL**

Appropriation	\$2,800.00	
	<hr/>	\$2,800.00
Expended		
Other Expenses:		
For Land	\$2,800.00	
	<hr/>	\$2,800.00

REVENUE

HIGHWAYS AND BRIDGES

HIGHWAYS

Appropriation	\$172,303.89	
		\$172,303.89

Expended

Salaries and Labor:

To John B. Blessington, Supt. of Streets.	\$ 2,300.00
Clerical Service	3,069.34
Labor	129,166.77

Other Expenses:

For Auto Care and Supplies.....	704.89
Concrete, Tar, Oil, Asphalt, etc.....	4,152.65
Damages	4.65
Edgestone and Flagging.....	121.81
Equipment, Hardware, etc.....	3,584.10
Fuel	221.14
Harnesses, Stable Supplies, etc.....	287.77
Hay, Grain, etc.....	13,572.21
Horses, Use of Teams, Horses and Autos	2,650.00
Horse Medicine and Veterinary Service	100.57
Lighting	317.05
Lime, Brick and Cement.....	973.02
Lumber	3,633.46
Office Supplies	281.81
Paints, Oils, etc.....	22.20
Repairs Bridge	2,848.09
Telephone	125.43
Water	679.99
Transfers	2,245.13
All Other	1,222.49

\$172,284.57

Returned to Treasury.....

19.32

\$172,303.89

SPRINKLING STREETS

Appropriation	\$27,000.00	
	<hr/>	\$27,000.00
Expended		
Salaries and Wages:		
To Labor	\$5,356.60	
Other Expenses:		
For Lighting	30.70	
Oil	8,920.89	
Use Track and Power.....	7,830.75	
Water	2,800.00	
Transfers	1,810.45	
All Other	189.52	
	<hr/>	26,938.91
Returned to Treasury.....		61.09
		<hr/>
		\$27,000.00
		<hr/>

STREET LIGHTING

Appropriation	\$121,100.00	
	<hr/>	\$121,100.00
Expended		
Other Expenses:		
For Electricity	\$86,660.89	
Gas	34,042.75	
All Other	15.00	
	<hr/>	\$120,718.64
Returned to Treasury.....		381.36
		<hr/>
		\$121,100.00
		<hr/>

STREET PENSIONS

Appropriation	\$1,600.00	
	<hr/>	\$1,600.00
Expended		
Pensions:		
To Various Persons.....	\$1,554.11	
	<hr/>	1,554.11
Returned to Treasury.....		45.89
		<hr/>
		\$1,600.00
		<hr/>

REVENUE

CHARITIES

CHARITY DEPARTMENT

Appropriation	\$119,218.74	
		<u>\$119,218.74</u>

Expended**General Administration****Salaries and Wages:**

To Martin F. Conley, Superintendent....	\$ 1,500.00
Clerks	3,096.71

Other Expenses:

For Office Supplies, Printing, etc.....	213.52
Telephone	30.58
Transportation	96.16

Chelmsford St. Hospital**Salaries and Wages:**

To Labor	14,361.17
----------------	-----------

Other Expenses:

For Drugs, Chemicals, etc.....	1,239.37
Dry Goods, Clothing, etc.....	4,769.31
Equipment, Hardware, etc.....	1,251.82
Furniture, etc.	325.04
Groceries, Provisions, etc.....	45,828.80
Hay, Grain, Straw, etc.....	3,945.77
Ice	339.12
Power, Fuel, Light, etc.....	11,559.55
Sterilizers	460.00
Water	1,270.60
All Other	1,893.80

Outside Relief by City**Salaries and Wages:**

To Inspector	917.00
City Physician	1,200.00
Dispensary Service	1,147.67
Physicians	2,100.00
Drivers	1,109.00

Other Expenses:

For Burials	119.00
Cash Allowance	4,715.86
Coal and Wood.....	1,834.84
Medicine and Medical Attendance...	1,309.97

Outside Relief, City:

State Institutions	1,036.61
Other Institutions	3,656.16

Relief, Other Cities and Towns:

Cities	1,912.81
Towns	391.37
All Other	620.49

All Other Expenses

For Ambulance Service, Fittings, Repairs, Insurance, etc.....	3,542.10	
Transfers	1,424.54	
	<u> </u>	\$119,218.74

MOTHERS—DEPENDENT CHILDREN

Appropriation	\$40,650.00	
	<u> </u>	\$40,650.00

Expended

Other Expenses:		
For Board and Medical Care.....	89.00	
Burials	45.00	
Mothers' Aid	868.80	
Transfers	4.00	
All Other	193.41	
	<u> </u>	40,649.87
Returned to Treasury.....		.13
		<u> </u>
		<u>\$40,650.00</u>

REVENUE

SOLDIERS' BENEFITS

SOLDIERS' BENEFITS

Appropriation	\$86,979.21	
	<hr/>	\$86,979.21

Expended**General Administration**

Salaries and Wages:

To Geo. E. Worthen, Supt. State Aid...	\$ 1,200.00
Mary F. McCann, Asst. Supt. State Aid	800.00

Other Expenses:

For Office Supplies, Printing, etc.....	28.50
Transfers	26.00

State Aid:

To Various Persons.....	12,804.00
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Military Aid:

To Various Persons.....	1,950.00
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Soldiers' Relief:

To Various Persons.....	13,397.00
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Other Expenses:

For Burials	694.75
Fuel	422.78
Groceries and Provisions.....	2,725.49
Medicine and Medical Attendance..	583.88
Transfers	39.10
All Other	313.85

German War:

To Various Persons.....	41,011.24
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Balance to 1918.....		75,996.59
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	10,982.62
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	<hr/>	\$86,979.21
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SOLDIERS' GRAVESS

Appropriation	\$350.00	
	<hr/>	\$350.00

Expended

Other Expenses:

For Gravestones, Setting, etc.....	\$136.50
Office Supplies, Printing, etc.....	7.00
All Other	37.25

Returned to Treasury.....		180.75
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	169.25
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	<hr/>	\$350.00
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REVENUE

EDUCATION

SCHOOL DEPARTMENT

Appropriation	\$467,085.31	
	<hr/>	\$467,085.31

Expended

Salaries and Wages:

To Hugh J. Molloy, Supt. of Schools....	\$ 3,413.33
Other Salaries and Wages.....	355,177.44
Retirement Fund	11,379.85

Other Expenses:

For Automobile Supplies and Repairs...	649.23
Fuel and Light.....	31,246.49
Furniture and Furnishings.....	554.18
Hardware	1,100.04
Insurance	131.45
Laundry	489.00
Office Supplies	576.91
Printing	1,765.40
Provisions	276.83
Support of Truants.....	1,789.87
Telephone	604.64
Text Books and Supplies.....	16,706.95
Training School—State Agreement..	27,392.95
Transportation	937.29
Transfers	3,862.68
Water	1,633.22
All Other	7,397.56

\$467,085.31
INDUSTRIAL SCHOOL

Appropriation	\$39,494.27	
	<hr/>	\$39,494.27

Expended

Salaries and Wages:

To Various Persons.....	\$27,064.90
Retirement Fund	284.56

Other Expenses:

For Fuel and Light.....	1,711.86
Laundry	198.01
Lumber	918.50
Machinery, Tools, Hardware, etc....	5,028.63
Telephone	90.53
Text Books and Supplies.....	893.71
Transfers	31.00
All Other	3,272.57

\$39,494.27

TEXTILE SCHOOL

Appropriation	\$10,004.82	
	<hr/>	\$10,004.82

Expended

To Trustees Lowell Textile School.....	\$10,004.82	
	<hr/>	\$10,004.82
		<hr/>

REVENUE

RECREATION

PARK

Appropriation	\$16,310.86	
	<hr/>	\$16,310.86
Expended		
Salaries and Wages:		
To John W. Kernan, Supt. Parks.....	\$1,990.33	
Clerk	663.69	
Labor	9,009.60	
Other Expenses:		
For Auto, Supplies and Repairs.....	1,199.71	
Hardware, Equipment, etc.....	350.25	
Hay, Grain, etc.....	605.52	
Office Supplies, Printing, etc.....	144.92	
Plants, Shrubs, etc.....	540.11	
Telephone	38.45	
Transfers	30.09	
Wading Pool	934.68	
All Other	512.21	
	<hr/>	16,019.56
Returned to Treasury.....	\$ 19.30	
Balance to 1918.....	272.00	
	<hr/>	291.30
		<hr/>
		\$16,310.86
		<hr/>

SPECIAL—PARKS

Appropriation	\$5,024.30	
	<hr/>	\$5,024.30
Expended		
Salaries and Wages:		
To Labor	\$1,407.75	
Other Expenses:		
For Hardware and Equipment.....	36.10	
Lumber	106.91	
Plants, Shrubs, etc.....	59.23	
Transfers	1,022.86	
Wading Pool	2,107.72	
All Other	283.73	
	<hr/>	\$5,024.30
		<hr/>

FOURTH OF JULY

Appropriation	\$625.00	
	<hr/>	\$625.00
Expended		
Salaries and Wages:		
To Labor	\$148.50	
Other Expenses:		
For Bell Ringing.....	10.00	
Entertainment	30.00	
Music	400.00	
Transfers	12.35	
	<hr/>	600.85
Returned to Treasury.....		24.15
		<hr/>
		\$625.00
		<hr/>

LABOR DAY

Appropriation	\$1,200.00	
	<hr/>	\$1,200.00
Expended		
Other Expenses:		
For Transfers	\$1,100.00	
	<hr/>	1,100.00
Returned to Treasury.....		100.00
		<hr/>
		\$1,200.00
		<hr/>

BAND CONCERTS

Appropriation	\$600.00	
	<hr/>	\$600.00
Expended		
Other Expenses:		
For Entertainment	\$ 50.00	
Music	533.64	
	<hr/>	583.64
Returned to Treasury.....		16.36
		<hr/>
		\$600.00
		<hr/>

MEMORIAL DAY—G. A. R.

Appropriation	\$1,000.00	
	<hr/>	\$1,000.00
Expended		
Other Expenses:		
For Flags and Standards.....	\$428.16	
Flowers, Decorations, etc.....	71.00	
Music	254.00	
Transportation	95.00	
All Other	151.84	
	<hr/>	\$1,000.00

MEMORIAL DAY—S. W. V.

Appropriation	\$400.00	
	<hr/>	\$400.00
Expended		
Other Expenses:		
For Catering	\$120.00	
Flags	20.40	
Music	137.00	
Transportation	40.00	
All Other	82.60	
	<hr/>	\$400.00

MEMORIAL DAY—S. OF V.

Appropriation	\$150.00	
	<hr/>	\$150.00
Expended		
Various Expenses	\$150.00	
	<hr/>	\$150.00

VETERAN FIREMEN'S ASSOCIATION

Appropriation	\$100.00	
	<hr/>	\$100.00
Expended		
Other Expenses:		
For Flowers	\$12.00	
Standards	68.00	
	<hr/>	80.00
Returned to Treasury.....		20.00
		<hr/>
		\$100.00

PLAYGROUNDS

Appropriation	\$4,300.00	
	<hr/>	\$4,300.00
Expended		
Salaries and Wages:		
To Labor	\$2,552.97	
Other Expenses:		
For Aux-telephone	300.00	
Costumes, Playground Apparatus, etc.	938.84	
Hardware	33.81	
Moving Pictures	50.00	
Transfers	7.00	
All Other	417.38	
	<hr/>	\$4,300.00
		<hr/>

SOLDIERS AND SAILORS' CELEBRATION

Appropriation	\$3,030.00	
	<hr/>	\$3,030.00
Expended		
Salaries and Wages:		
To Labor	\$ 52.80	
Other Expenses:		
For Catering, Cigars, etc.....	1,302.05	
Music	376.50	
Office Supplies, Printing, etc.....	22.90	
Transportation	799.81	
All Other	209.46	
	<hr/>	2,763.52
Returned to Treasury.....		266.48
		<hr/>
		\$3,030.00
		<hr/>

BOARD OF TRADE AGRICULTURAL EXHIBITION

Appropriation	\$1,000.00	
	<hr/>	\$1,000.00
Expended		
Other Expenses:		
For Advertising	\$ 50.00	
Decorations	300.00	
Music	350.00	
Refreshments	125.00	
All Other	175.00	
	<hr/>	\$1,000.00
		<hr/>

REVENUE

LIBRARIES

LIBRARY

Appropriation	\$24,368.16	
	<hr/>	\$24,368.16
	Expended	
Salaries and Wages:		
To Frederick A. Chase.....	\$ 2,200.00	
All Other Service.....	11,601.29	
Other Expenses:		
For Binding Books and Magazines.....	791.28	
Books	3,889.34	
Lighting	772.96	
Linoleum	1,372.00	
Magazines, Newspapers, etc.....	838.71	
Office Supplies, Printing, etc.....	883.36	
Portrait	500.00	
All Other	1,519.22	
	<hr/>	\$24,368.16

RESTORING PORTRAITS, MEMORIAL HALL, LIBRARY

Balance from 1916.....	\$120.00	
	<hr/>	\$120.00
	Expended	
Salaries and Wages:		
To Services	\$70.00	
Other Expenses	43.17	
	<hr/>	113.17
Balance to 1918.....		6.83
		<hr/>
		\$120.00

RECONSTRUCTION LIBRARY—MEMORIAL HALL

Balance from 1916.....	\$6,507.45	
	<hr/>	\$6,507.45
	Expended	
Salaries and Wages:		
To Labor	\$ 619.90	
Other Expenses:		
For Architect	100.00	
Carpentry Work	850.00	
Plumbing, Heating, etc.....	2,421.00	
All Other	2,064.36	
	<hr/>	6,055.26
Balance to 1918.....		452.19
		<hr/>
		\$6,507.45

RESTORING CONTENTS LIBRARY AND MEMORIAL HALL

Balance from 1916.....	\$1,585.34	
	<hr/>	\$1,585.34
Expended		
Other Expenses:		
For Transfers	\$1,585.34	
	<hr/>	<hr/>
		\$1,585.34

REVENUE

PUBLIC SERVICE ENTERPRISES

WATER DEPARTMENT

Receipts	\$287,628.26	
Transfers	26,699.71	
	<hr/>	\$314,327.97

Expended

Salaries and Wages:

To Robert J. Thomas, Supt. Water	
Works	\$ 2,000.00
All Other Service.....	137,819.02

Other Expenses:

For Autos, Auto Repairs and Supplies..	6,934.39
Damages	31.00
Debt Payments	47,000.00
Equipment and Repairs.....	4,462.60
Fuel	30,604.25
Hay, Grain and Straw.....	590.78
Insurance	1,838.80
Interest	59,048.75
Lumber	976.27
Meters and Fittings.....	4,259.91
Office Supplies, Printing, etc.....	814.45
Oil, Waste, Packing, etc.....	2,285.75
Pensions	283.00
Pipe and Fittings.....	5,885.63
Refunds	215.48
Telephone	193.20
Transfers	376.08
Vacancy List	94.79
Valves, Gates, Hydrants, etc.....	3,152.97
All Other	3,519.10

312,386.22

Balance to 1918.....

1,941.75

\$314,327.97

REVENUE

CEMETERIES

CEMETERIES

Receipts	\$16,665.02	
	<hr/>	\$16,665.02
Expended		
Salaries and Wages:		
To Thomas Duckworth, Supt. Edson Cemetery	\$1,332.50	
Clerk	936.00	
Labor	9,229.07	
Other Expenses:		
For Contract	900.00	
Hardware, Equipment, etc.....	514.40	
Hay, Grain, Straw, etc.....	141.90	
Office Supplies, Printing, etc.....	144.77	
Perpetual Care Signs.....	38.80	
Plants, etc.	230.40	
Transfers	11.00	
Water	57.88	
All Other	809.06	
	<hr/>	14,345.78
Balance to 1918.....		2,319.24
		<hr/>
		\$16,665.02
		<hr/>

REVENUE

DEBT, INTEREST, SINKING FUNDS

INTEREST

Appropriation	\$204,252.98	
	<hr/>	\$204,252.98
Expended		
For Interest	\$202,198.12	
	<hr/>	\$202,198.12
Returned to Treasury.....		2,054.86
		<hr/>
		\$204,252.98
		<hr/>

CITY DEBT

Appropriation	\$347,341.30	
	<hr/>	\$347,341.30
Expended		
To Various Financial Institutions and Individuals	\$347,341.30	
	<hr/>	\$347,341.30
		<hr/>

SINKING FUNDS

Appropriation	\$30,500.00	
	<hr/>	\$30,500.00
Expended		
To Commissioners' Sinking Fund.....	\$30,500.00	
	<hr/>	\$30,500.00
		<hr/>

REVENUE

TAXES

STATE TAX

Appropriation	\$211,860.00	
	<u> </u>	\$211,860.00

Expended

To Commonwealth of Massachusetts.....	\$211,860.00	
	<u> </u>	\$211,860.00

NATIONAL BANK TAX

Appropriation	\$12,000.41	
	<u> </u>	\$12,000.41

Expended

To Commonwealth of Massachusetts.....	\$12,000.41	
	<u> </u>	\$12,000.41

COUNTY TAX

Appropriation	\$96,893.18	
	<u> </u>	\$96,893.18

Expended

To County of Middlesex.....	\$96,893.18	
	<u> </u>	\$96,893.18

LIQUOR LICENSES

Appropriation	\$36,862.25	
	<u> </u>	\$36,862.25

Expended

To Commonwealth of Massachusetts.....	\$36,862.25	
	<u> </u>	\$36,862.25

GRADE CROSSINGS

Appropriation	\$4,677.38	
	<u> </u>	\$4,677.38

Expended

To Commonwealth of Massachusetts.....	\$4,677.38	
	<u> </u>	\$4,677.38

STATE HIGHWAY TAX

Appropriation	\$1,325.00	
	<hr/>	1,325.00
Expended		
To Commonwealth of Massachusetts.....	\$1,325.00	
	<hr/>	1,325.00
		<hr/>

CORPORATION TAX

Appropriation	\$4.97	
	<hr/>	\$4.97
Expended		
To Commonwealth of Massachusetts.....	\$4.97	
	<hr/>	\$4.97
		<hr/>

SOLDIERS' EXEMPTION

Appropriation	\$17.86	
	<hr/>	\$17.86
Expended		
To Commonwealth of Massachusetts.....	\$17.86	
	<hr/>	\$17.86
		<hr/>

REVENUE



UNCLASSIFIED

CLAIMS

Appropriation	\$9,875.00	
	<hr/>	\$9,875.00
Expended		
Other Expenses:		
For Court Services.....	\$ 486.80	
Damages	1,362.01	
Injuries	4,291.00	
Brosnan and Pinder Payments.....	1,190.21	
Rental	200.00	
Street Watering and Tax Refunds..	753.78	
Tax Titles	1,021.57	
Transfers	125.00	
All Other	192.79	
	<hr/>	\$9,623.16
Balance to 1918.....		251.84
		<hr/>
		\$9,875.00
		<hr/>

REVISION OF ORDINANCES

Balance from 1916.....	\$500.00	
	<hr/>	\$500.00
Expended		
Other Expenses:		
For Typewriting	\$4.50	
	<hr/>	4.50
Balance to 1918.....		495.50
		<hr/>
		\$500.00
		<hr/>

AUDITING CITY BOOKS

Appropriation	\$1,300.00	
	<hr/>	\$1,300.00
Expended		
Other Expenses:		
For Auditing	\$1,296.00	
	<hr/>	\$1,296.00
Returned to Treasury		4.00
		<hr/>
		\$1,300.00
		<hr/>

WORKINGMEN'S COMPENSATION ACT

Appropriation	\$5,000.00	
	<hr/>	\$5,000.00
	Expended	
To Various Persons.....	\$1,920.45	
Other Expenses:		
For Arbitrators' Services.....	85.00	
Injuries	525.00	
Medical Treatment	429.72	
Printing	10.00	
All Other	11.58	
	<hr/>	2,981.75
Returned to Treasury.....		2,018.25
		<hr/>
		\$5,000.00
		<hr/>

FROM REVENUE

HEALTH AND SANITATION

SEWER CONSTRUCTION

Balance from 1916.....	\$ 2,653.80	
Appropriation	75,000.00	
Receipts	18.28	
	<hr/>	\$77,672.08
Expended		
Labor:		
To Various Persons.....	\$50,059.12	
Other Expenses:		
For Brick and Cement.....	1,422.84	
Castings	3,202.52	
Dynamite	795.07	
Fuel	310.47	
Lumber	680.11	
Pipe and Fittings.....	9,652.28	
Rubber Goods	226.70	
Transfers	2,469.03	
All Other	2,322.20	
	<hr/>	\$71,140.34
Balance to 1918.....		6,531.74
		<hr/>
		\$77,672.08

ISOLATION HOSPITAL

Balance from 1916.....	\$ 45,656.87	
Appropriation	175,000.00	
	<hr/>	\$220,656.87
Expended		
Other Expenses:		
For Advertising	50.82	
Architect	7,550.00	
Contracts	135,480.15	
Meter and Fittings.....	223.44	
Transfers	4,540.04	
All Other	225.00	
	<hr/>	148,069.45
Balance to 1918.....		72,587.42
		<hr/>
		\$220,656.87

ISOLATION HOSPITAL—EQUIPMENT AND FURNISHINGS

Appropriation	\$24,000.00	
	<hr/>	\$24,000.00
Expended		
Balance to 1918.....	\$24,000.00	
	<hr/>	\$24,000.00

FROM REVENUE

HIGHWAYS AND BRIDGES

PAVING

Balance from 1916.....	\$22,289.16	
Receipts	1,075.68	
Transfers	10,359.32	
Appropriation	50,000.00	
	<hr/>	\$83,724.16
Expended		
For Labor:		
Various Persons	\$37,910.37	
Other Expenses:		
For Brick and Cement.....	4,781.36	
Concrete	3,699.58	
Crushed Stone	2,768.94	
Edgestone, etc.	4,118.12	
Freight	665.93	
Lumber	122.21	
Paving Blocks	12,938.84	
Sand	3,034.47	
Transfers	2,098.75	
Teaming	1,835.11	
All Other	3,073.55	
	<hr/>	77,047.23
Balance to 1918.....		6,676.93
		<hr/>
		\$83,724.16

MACADAMIZING

Balance from 1916.....	\$ 40.75	
Receipts	1,767.00	
Appropriation	70,000.00	
	<hr/>	\$71,807.75
Expended		
For Labor:		
To Various Persons.....	\$35,675.05	
Other Expenses:		
For Concrete, etc.....	794.98	
Crusher Repairs	330.09	
Fuel	3,171.84	
Hay, Grain, etc.....	381.00	
Oil, Tarite, Tar, etc.....	8,597.22	
Steam Road Roller.....	7,150.00	
Stone	5,614.05	
Teaming	6,160.87	
Transfers	223.65	
All Other	2,780.47	
	<hr/>	70,879.22
Balance to 1918.....		928.53
		<hr/>
		\$71,807.75

NEW SIDEWALKS

Balance from 1916.....	4.56	
Receipts	262.34	
Appropriation	10,000.00	
	<hr/>	\$10,266.90
Expended		
For Labor:		
To Various Persons.....	\$3,031.04	
Other Expenses:		
For Concrete	1,719.16	
Edgestone	2,760.97	
Granolithic Work	2,077.45	
Transfers	352.79	
	<hr/>	9,941.41
Balance to 1918.....		325.49
		<hr/>
		\$10,266.90
		<hr/>

WEDGE AND PORTER STREETS

Balance from 1916.....	\$00.10	
	<hr/>	\$00.10
Expended		
Balance to 1918.....	\$00.10	
	<hr/>	\$00.10

PAVING AND WIDENING LAWRENCE STREET

Balance from 1916.....	\$1,444.44	
	<hr/>	\$1,444.44
Expended		
Balance to 1918.....	\$1,444.44	
	<hr/>	\$1,444.44
		<hr/>

PAWTUCKET FALLS BRIDGE

Balance from 1916.....	\$25,951.80	
Appropriation	24,000.00	
	<hr/>	\$49,951.80
Expended		
Other Expenses:		
For Contracts	\$36,658.60	
Fittings, etc.	6,451.56	
Transfers	2,497.03	
Wire	1,459.25	
All Other	383.56	
	<hr/>	47,450.00
Balance to 1918.....		2,501.80
		<hr/>
		\$49,951.80
		<hr/>

EXTENSION DUMMER STREET

Balance from 1916.....	\$11,151.28	
Appropriation	473.91	
	<hr/>	\$11,625.19

Expended

Other Expenses:		
For Land and Buildings.....	\$ 1,265.22	
Transfers	10,359.97	
	<hr/>	\$11,625.19

WIDENING SCHOOL AND MAMMOTH ROAD

Balance from 1916.....	\$6,856.31	
	<hr/>	\$6,856.31

Expended

Other Expenses:		
For Land and Buildings.....	\$3,562.62	
Transfers	230.95	
	<hr/>	\$3,793.57
Balance to 1918.....		3,062.74
		<hr/>
		\$6,856.31

SALE BUILDINGS DUMMER STREET

Balance from 1916.....	\$277.30	
	<hr/>	\$277.30

Other Expenses:**Expended**

For Services	\$125.00	
	<hr/>	\$125.00
Balance to 1918.....		152.30
		<hr/>
		\$277.30

FROM REVENUE

EDUCATION

ACQUIRING LAND, CONSTRUCTING HIGH SCHOOL

Balance from 1916.....	\$18,863.99	
Appropriation	75,000.00	
	<hr/>	\$93,863.99

Expended

For Labor:		
To Various Persons.....	\$ 1,505.88	
Other Expenses:		
For Advertising	26.22	
Architect	808.33	
Paints, etc.	406.16	
Steel	10,663.56	
Transfers	29.79	
All Other	3,496.22	
	<hr/>	\$16,936.16
Balance to 1918.....		76,927.83
		<hr/>
		\$93,863.99
		<hr/>

ACQUIRING LAND AND CONSTRUCTING SCHOOLS

Balance from 1916.....	\$ 51,193.21	
Receipts	451.00	
Appropriation	180,000.00	
	<hr/>	\$231,644.21

Expended

For Labor:		
To Various Persons.....	\$ 3,223.61	
Other Expenses:		
For Architect	6,527.00	
Contracts	110,141.31	
Hardware	76.71	
Land	3,500.00	
Transfers	204.44	
All Other	2,605.76	
	<hr/>	\$126,278.83
Balance to 1918.....		105,365.38
		<hr/>
		\$231,644.21
		<hr/>

SCHOOL HOUSE REPAIRS—STATE POLICE

Balance from 1916.....	\$7,866.41	
	<hr/>	\$7,866.41
Expended		
For Labor:		
To Various Persons.....	\$5,237.49	
Other Expenses:		
For Fire Extinguishers.....	262.50	
Hardware	7.50	
Heating	545.00	
Plumbing	1,239.45	
All Other	394.79	
	<hr/>	\$7,686.73
Balance to 1918.....		179.68
		<hr/>
		\$7,866.41
		<hr/>



FROM REVENUE

RECREATION

CHAMBERS STREET PLAYGROUND

Balance from 1916.....	\$7,000.00	
	<hr/>	\$7,000.00
Expended		
Other Expenses:		
For Land	\$6,076.29	
Title Research	31.26	
	<hr/>	\$6,107.55
Balance to 1918.....		892.45
		<hr/>
		\$7,000.00
		<hr/>

LAND FOR PUBLIC PARKS

Balance from 1916.....	\$5,803.53	
Transfer	548.59	
	<hr/>	\$6,352.12
Expended		
Other Expenses:		
For Land	\$5,100.00	
	<hr/>	\$5,100.00
Balance to 1918.....		1,252.12
		<hr/>
		\$6,352.12
		<hr/>

PARK PURPOSES

Balance from 1916.....	\$20,000.00	
Receipts	535.00	
	<hr/>	\$20,535.00
Expended		
Other Expenses:		
For Contracts	\$ 5,676.41	
Land and Buildings.....	11,712.37	
Title Research	67.00	
Transfers	571.63	
All Other	135.85	
	<hr/>	\$18,163.26
Balance to 1918.....		2,371.74
		<hr/>
		\$20,535.00
		<hr/>

FAIRGROUNDS—PARK

Appropriation	\$20,000.00	
	<hr/>	\$20,000.00
Expended		
Other Expenses:		
For Services	\$100.00	
Transfers	16.41	
All Other	4.75	
	<hr/>	\$121.16
Balance to 1918.....		19,878.84
		<hr/>
		\$20,000.00
		<hr/>

FROM REVENUE

WATER WORKS

PURIFYING AND CONSTRUCTING WATER SYSTEM

Balance from 1916.....	\$3,561.02	
	<hr/>	\$3,561.02
Expended		
Other Expenses:		
For Transfer	\$1,252.22	
	<hr/>	\$1,252.22
Balance to 1918.....		2,308.80
		<hr/>
		\$3,561.02
		<hr/>

PURCHASE OF LAND

Balance from 1916.....	\$10,551.23	
	<hr/>	\$10,551.23
Expended		
Other Expenses:		
For Execution of Court.....	\$1,535.72	
Land	4,100.00	
Title Research	45.00	
	<hr/>	\$5,680.72
Balance to 1918.....		4,870.51
		<hr/>
		\$10,551.23
		<hr/>

FROM REVENUE

UNCLASSIFIED

MUNICIPAL PURPOSES

Balance from 1916.....	<u>\$394.16</u>	\$394.16
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Expended

Balance to 1918.....	<u>\$394.16</u>	<u>\$394.16</u>
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GENERAL INFORMATION

CITY AUDITOR'S REPORT OF FUNDS HELD
AND USED BY CITY

CITY VALUATION

PROPERTY OWNED BY CITY

TABLES

LOANS

DUMMER STREET

NEW HIGH SCHOOL

PAWTUCKET BRIDGE

To the Honorable Municipal Council:

Gentlemen:—Complying with the Acts of 1914, section 322, I have made the Annual Audit of all Trust Funds of the City and other funds held, and make the following report.

CHAS. D. PAIGE,

Auditor.

May, 1918.

JOHN DAVIS LIBRARY FUND

	Cash	Securities	Total
On hand at beginning of year..\$	2.52	\$102,561.63	\$102,564.15
On hand at end of year.....	486.02	100,544.15	101,030.17

Receipts

Securities sold	\$2,000.00
Accrued interest on securities sold	33.50
Mortgage principal	25.00
Income on securities....	3,248.00
Interest on deposits....	8.44

Total receipts	\$5,314.94
Cash Jan. 1, 1917.....	2.52
	<u>\$5,317.46</u>

Payments

To Library Trustees....	\$4,461.44
Discount on securities sold	370.00

Total payments	\$4,831.44
Cash Dec. 31, 1917.....	486.02
	<u>\$5,317.46</u>

The Securities

Registered Bonds	\$ 84,000.00
Railroad Stocks	8,200.00
Industrial Stocks	2,100.00
Bank Stocks	3,500.00
Mortgage Notes	2,550.00
Central Savings Bank Book No. 35073.....	194.15
Cash in Appleton National Bank.....	486.02

Total cash and securities..... \$101,030.17

PERPETUAL CARE FUND BURIAL GROUNDS

On hand Jan. 1, 1917.....	\$98,550.00
Received during the year from:	
Miss H. Augusta Lord.....	\$100.00
Herbert J. Pratt, Executor.....	200.00
Annie Fairburn Collins.....	100.00
George B. Graves.....	50.00
Mrs. Leander F. Conley.....	100.00
James F. McKissock.....	200.00
Mary Jane Lees.....	100.00
J. C. Wadleigh.....	100.00
John F. McCoy.....	50.00
John F. McCoy.....	50.00
Mrs. A. L. Stott.....	100.00
Robert Boyd	50.00
Robt. and Maud Mary Mountford.	100.00
Mary A. Mack and Alice B. Phelps	100.00
Alvah J. Baxter.....	100.00
Alvah J. Baxter.....	100.00
Mrs. Margaret Cameron.....	100.00
J. E. Farnsworth.....	100.00
A. M. Robertson.....	100.00
Anna L. Wilson.....	100.00
William James Marshall.....	50.00
Mary P. P. Bunker.....	100.00
Margery P. P. Bunker, Trustee....	100.00
Mrs. Anna Randall.....	100.00
A. K. Mansfield.....	200.00
George E. Thompson.....	100.00
George E. Thompson.....	100.00
Wheelock G. Tilton.....	100.00
Flora A. Pirington.....	100.00
Lizzie F. Salmon.....	100.00
Arthur W. Lang.....	100.00
Mrs. Arthur E. Adams.....	100.00
Eliza C. Corner.....	100.00
William P. Lawler, administrator.	100.00
William F. Copson.....	100.00
Mary A. Sharp.....	100.00
Nellie L. Brodie and Jennie B.	
Lovering	100.00
Alden O. Dane.....	100.00
Willard E. Overlock, executor....	115.00
Orrin H. Allen, administrator.....	100.00
Jessie E. Hodge.....	100.00
William Vining	100.00
Esther J. Hylan.....	100.00
Martin Robbins & Son.....	100.00

Perpetual Care Burial Grounds—Continued

Oracy Samuels	100.00
Barbara Brelsford	50.00
Charles W. Lawrence.....	50.00
Mrs. George Clegg.....	100.00
Alexander Clapperton	50.00
Alfred A. Robinson.....	100.00
Frank E. Dorrothy, administrator.	100.00
David E. Cornock, executor.....	100.00
Sarah A. Preston.....	100.00
Isabelle Hoogerziel, administrator.	100.00
Annie B. McFadden.....	100.00
Matilda Zetterman	100.00
Geo. Boudreau and Chas. G. Bailly.	100.00
Virginia F. Field.....	100.00
Mary E. Fowler.....	100.00
Robert F. Chase.....	100.00
Herbert V. Hunt.....	100.00
John W. Breen.....	100.00
Ellen O'Leary.....	100.00
Abbie A. Corner.....	100.00
Mary Whitney Withington.....	100.00
Jane Hannifin	100.00
Avery B. Clark.....	100.00
George E. Leavitt.....	100.00
Frank M. Aldrich.....	100.00
Mrs. William J. Robinson.....:	50.00
Mary A. Schofield.....	100.00
Chas. H. Clogston.....	25.00
Esther M. Small, administrator....	100.00
Arthur J. Murkland.....	100.00
Geo. W. Healey.....	25.00
	<hr/>
	7,215.00
	<hr/>
	\$105,765.00

The following amounts are invested:

	Fund	Total	Total of Fund
Lowell Five Cent Savings Bank.\$	14,075.00	\$ 3,068.26	
Central Savings Bank.....	14,400.00	2,413.94	
Merrimack River Savings Bank	15,350.00	2,551.62	
Mechanics Savings Bank.....	14,100.00	2,321.24	
City Institution for Savings....	12,700.00	2,869.34	
Lowell Institution for Savings.	14,325.00	2,217.94	
Washington Savings Institution	13,600.00	2,618.87	
Middlesex Safe Deposit & Trust			
Co.	7,215.00	781.09	
	<hr/>	<hr/>	
	\$105,765.00	\$18,842.30	\$124,607.30
Amount of undrawn interest for use of Cemetery, Jan.			
1, 1918			\$18,842.30

WATER LOAN SINKING FUND

Due November 1, 1920

Loan \$1,000,000.00

	Cash	Securities	Total
On hand at beginning of year...	\$ 1,960.12	\$809,862.60	\$811,822.72
On hand at end of year.....	31,131.22	829,621.30	860,752.52

Receipts

Payments

Annual appropriation..	\$ 16,000.00	Securities purchased	
Income and securities	34,674.08	(par)	\$ 40,930.00
Interest on deposits..	99.58	U. S. Liberty Bonds,	
Securities matured and		60%	27,000.00
sold	48,171.30	Premiums on securities	1,371.54
Discount on securities	135.70	Accrued interest on se-	
		curities purchased .	608.02
Total receipts	\$ 99,080.66	Total payments	\$ 69,909.56
Cash Jan. 1, 1917....	1,960.12	Cash Dec. 31, 1917...	31,131.22
	<u>\$101,040.78</u>		<u>\$101,040.78</u>

No.	Securities	Amount
12	Athol, Town of.....	\$12,000.00
26	Amerien Tel. & Tel. Co.....	26,000.00
5	Akron, City of.....	5,000.00
1	Attleborough, Town of.....	1,000.00
1	Boston & Maine Railroad.....	10,000.00
4	Boston & Maine Railroad.....	4,000.00
15	Boston & Maine Railroad.....	15,000.00
10	Boston & Lowell Railroad.....	10,000.00
2	Boston & Lowell Railroad.....	2,000.00
5	Bath, City of	5,000.00
2	Boston, City of.....	11,000.00
3	Boston, City of.....	15,000.00
5	Bridgeport, City of.....	5,000.00
1	Buffalo, City of.....	5,000.00
35	Boston Elevated	35,000.00
10	Boston Elevated	10,000.00
10	Baltimore & Ohio Railroad.....	10,000.00
8	C. B. & Q. Railroad.....	8,000.00
12	C. B. & Q. Railroad.....	12,000.00

Water Loan Sinking Fund—Continued

No.	Securities	Amount
15	Chicago, City of.....	\$15,000.00
4	Canton, Town of.....	4,000.00
5	Canton, Town of.....	5,000.00
8	Canton, Town of.....	8,000.00
2	Canton, Town of.....	2,000.00
1	Cleveland, City of.....	10,000.00
12	Cleveland, City of.....	12,000.00
36	Concord & Montreal.....	36,000.00
1	Chicopee, City of.....	1,000.00
4	Chicago, Mill. & St. Paul.....	4,000.00
4	Chicago, Mill. & St. Paul.....	4,000.00
10	Chicago, Mill. & St. Paul.....	10,000.00
1	Chicago & No. Western.....	5,000.00
5	Delaware & Hudson Railroad.....	25,000.00
15	Delaware & Hudson Railroad.....	15,000.00
1	Dayton, City of.....	1,000.00
2	East Portland, City of.....	2,000.00
2	Flint, City of.....	2,000.00
10	Fitchburg Railroad	10,000.00
10	Haverhill, City of.....	10,000.00
5	Hamilton, City of.....	2,500.00
20	Illinois Central Railroad.....	20,000.00
40	Kennebec Water Dist.....	40,000.00
4	Louraine, City of.....	4,000.00
41	Lowell, City of.....	41,000.00
2	Lowell, City of.....	2,000.00
1	Lowell, City of.....	342.60
3	Lima, City of.....	3,000.00
2	Lakewood, City of.....	2,000.00
3	Lakewood, City of.....	970.00
4	Lexington, Town of.....	4,000.00
5	Louisville & Nashville.....	5,000.00
18	Lynn & Boston Railroad.....	18,000.00
10	Los Angeles, City of.....	10,000.00
6	Milwaukee & Lake Shore.....	6,000.00
5	Milwaukee, City of.....	5,000.00
5	Milwaukee, City of.....	5,000.00
5	Milton, Town of.....	5,000.00
1	Milton, Town of.....	1,000.00
10	Minnesota, State of.....	10,000.00
6	Minnesota, State of.....	6,000.00

Water Loan Sinking Fund—Continued

No.	Securities	Amount
1	Massachusetts, State of.....	20,000.00
5	Minneapolis, City of.....	5,000.00
3	Minneapolis, City of.....	3,000.00
9	N. Y., Lack. & Western.....	9,000.00
60	N. Y., N. H. & H. Railroad.....	60,000.00
5	N. Y., N. H. & H. Railroad.....	5,000.00
4	Newton, City of.....	4,000.00
1	New Haven, City of.....	1,000.00
38	Northfield, Town of.....	20,000.00
1	New Bedford, City of.....	4,000.00
3	Omaha, City of.....	1,250.00
1	Omaha, City of, South.....	300.00
2	Omaha, City of.....	1,000.00
1	Portland, City of.....	4,500.00
5	Penobscot Shore Line.....	5,000.00
7	Penobscot Shore Line.....	7,000.00
1	Quincy, City of.....	1,000.00
4	Reading, Town of.....	4,000.00
2	Rochester, City of.....	10,000.00
5	Rome W. & O.....	5,000.00
2	St. Johnsbury & Lake Champlain..	2,000.00
5	Saginaw, City of.....	5,000.00
5	San Francisco, City of.....	5,000.00
60%	U. S. Liberty Bonds.....	27,000.00
3	Youngstown, City of.....	3,000.00
12	Youngstown, City of.....	5,930.00
14	Waterville, City of.....	14,000.00
5	Wilkesbarre, City of.....	5,000.00
1	Waltham, City of.....	1,000.00
20	Worcester Consolidated	20,000.00
Total Amount Securities.....		\$829,621.30
Cash		31,131.22
Total Fund		\$860,752.52

NEW SCHOOL HOUSES SINKING FUND

Due July, 1926

Loan \$200,000.00

	Cash	Securities	Total
On hand at the beginning of year.	\$ 181.29	\$113,000.00	\$113,181.29
On hand at the end of year.....	5,452.42	116,000.00	121,452.42

Receipts

Annual appropriations.	\$ 4,000.00
Income on securities...	4,520.00
Interest on deposits...	21.58
Securities matured and sold	2,000.00

Total receipts	\$10,541.58
Cash on hand Jan. 1, '17	181.29
	<u>\$10,722.87</u>

Payments

Securities purchased (par)	\$ 5,000.00
Premiums	203.10
Accrued interest	67.35

Total payments	\$ 5,270.45
Cash on hand Dec. 31, 1917	5,452.42

	<u>\$10,722.87</u>
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No.	Securities	Amount
5	Albany, City of.....	\$5,000.00
3	American Tel. & Tel. Co.....	3,000.00
4	Boston & Maine Railroad.....	4,000.00
1	Beverly, City of.....	1,000.00
5	Boston Elevated	5,000.00
4	C. B. & Q. Railroad.....	4,000.00
3	C. B. & Q. Railroad.....	3,000.00
5	Chicago, Milwaukee & St. Paul....	5,000.00
4	Chicago, City of.....	4,000.00
1	Chicago & No. Western Railroad...	5,000.00
8	Concord & Montreal Railroad.....	8,000.00
3	Decatur, City of.....	3,000.00
2	Everett, City of.....	2,000.00
7	Fort Wayne, City of.....	7,000.00
3	Hillsborough, County of.....	3,000.00
8	Indianapolis, City of.....	8,000.00
1	Lowell, City of.....	1,000.00
14	Lowell, City of.....	14,000.00

New School Houses Sinking Fund—Continued

No.	Securities	Amount
2	Minneapolis Union R. R.....	2,000.00
1	Minneapolis, City of.....	10,000.00
3	Minneapolis, City of.....	3,000.00
5	Milwaukee, City of.....	5,000.00
3	Milwaukee, City of.....	3,000.00
1	Middlesex, County of.....	1,000.00
1	N. Y., Lack. & Western.....	1,000.00
5	N. Y., N. H. & H. Railroad.....	5,000.90
1	Winchester, Town of.....	1,000.00
Total Amount Securities.....		\$116,000.00
Cash		5,452.42
Total Value of Fund.....		\$121,452.42

HIGH SCHOOL SINKING FUND

Due April, 1921

Loan \$150,000.00

	Cash	Securities	Total
On hand at beginning of the year.	\$ 285.33	\$124,500.00	\$124,785.33
On hand at end of the year.....	3,846.32	129,000.00	132,846.32
Receipts			
Annual appropriation ..	\$3,000.00		
Income on securities....	5,227.50		
Interest on deposits....	23.84		
Securities matured and sold	500.00		
Discount and deposits purchased	10.00		
Total receipts	\$8,761.34		
Cash on hand Jan. 1, '15	285.33		
	<u>\$9,046.67</u>		
Payments			
Securities purchased (par)		\$5,000.00	
Premiums		176.50	
Accrued interest on securities purchased ...		23.55	
Total payments		<u>\$5,200.35</u>	
Cash on hand Dec. 31, 1915			3,846.32
			<u>\$9,046.67</u>

No.	Securities	Amount
3	American Tel. & Tel. Co.....	\$3,000.00
1	Buffalo, City of.....	1,000.00
1	Boston & Maine Railroad.....	1,000.00
5	C. B. & Q. Railroad.....	5,000.00
5	C. B. & Q. Railroad.....	5,000.00
5	Chicago, Milwaukee & St. Paul....	5,000.00
3	Chicago, Milwaukee & St. Paul....	3,000.00
8	Chicago, Milwaukee & St. Paul....	8,000.00
1	Chicago & No. Western.....	5,000.00
1	Dayton, City of.....	1,000.00
4	Dayton, City of.....	4,000.00
2	Dayton, City of.....	2,000.00
3	Fort Wayne, City of.....	3,000.00
3	Haverhill, City of.....	3,000.00
5	Indianapolis, City of.....	5,000.00
2	Lowell, City of.....	\$ 2,000.00
15	Lowell, City of.....	15,000.00

High School Sinking Fund—Continued

No.	Securities	Amount
1	Lowell, City of.....	1,000.00
9	Lowell, City of.....	9,000.00
5	Milwaukee, City of.....	5,000.00
5	Milwaukee, City of.....	5,000.00
5	Milwaukee, City of.....	5,000.00
3	N. Y., Lack. & Western.....	3,000.00
12	N. Y., N. H. & H. Railroad.....	12,000.00
10	N. Y., N. H. & H. Railroad.....	10,000.00
1	New Bedford, City of.....	1,000.00
2	Salem, City of.....	2,000.00
2	Saginaw, City of.....	2,000.00
1	St. Paul, City of.....	1,000.00
2	Winchester, Town of.....	2,000.00
	Total Amount Securities.....	\$129,000.00
	Cash	3,846.32
	Total Value Fund.....	\$132,846.32

CITY HALL AND MEMORIAL BUILDING SINKING FUND

Due October 1, 1920

Loan \$450,000.00

	Cash	Securities	Total
On hand at beginning of the year.	\$1,749.25	\$367,100.00	\$368,849.25
On hand at end of the year.....	9,734.24	381,900.00	391,634.24
Receipts		Payments	
Annual appropriation .	\$ 7,500.00	Securities purchased	
Income on securities...	15,598.00	(par)	\$15,000.00
Interest on deposits...	75.61	Premiums	336.45
Securities matured ...	200.00	Accrued interest (on	
Discount on securities		securities purchased)	92.97
purchased	40.80		
		Total payments	\$15,429.42
Total receipts	\$23,414.41	Cash on hand Dec. 31,	
Cash on hand Jan. 1, '17	1,749.25	1917	9,734.24
	\$25,163.66		\$25,163.66

No.	Securities	Amount
8	American Tel. & Tel. Co.....	\$ 8,000.00
10	Augusta, City of.....	10,000.00
9	Arlington, Town of.....	9,000.00
4	Akron, City of.....	4,000.00
2	Attleborough, Town of.....	2,000.00
1	Boston, City of.....	5,000.00
1	Boston, City of.....	6,000.00
1	Brookline, Town of.....	3,000.00
1	Brockton, City of.....	1,000.00
5	Brockton, City of.....	5,000.00
2	Buffalo, City of.....	10,000.00
10	Boston & Maine Railroad.....	10,000.00
10	C. B. & Q. Railroad.....	10,000.00
8	C. B. & Q. Railroad.....	8,000.00
2	Chicago, City of.....	2,000.00
3	Chicago, Milwaukee & St. Paul....	3,000.00
4	Chicago, Milwaukee & St. Paul....	4,000.00
24	Chicago, Milwaukee & St. Paul....	24,000.00
3	Chicopee, City of.....	3,000.00
1	Chicago & No. Western.....	10,000.00
3	Canton, City of.....	3,000.00
1	Concord & Montreal.....	1,000.00

City Hall and Memorial Building Sinking Fund—Continued

No.	Securities	Amount
10	Delaware & Hudson.....	10,000.00
10	East Portland, City of.....	10,000.00
10	Fitchburg Railroad	10,000.00
2	Hamilton, City of.....	1,000.00
2	Hamilton, City of.....	1,000.00
7	Indianapolis, City of.....	7,000.00
5	Illinois Central	5,000.00
9	Louisville & Nashville.....	9,000.00
1	Lowell, City of.....	1,000.00
63	Lowell, City of.....	63,000.00
1	Lowell, City of.....	600.00
10	Lynn & Boston Railroad.....	10,000.00
1	Middleton, City of.....	1,000.00
5	Milwaukee, City of.....	5,000.00
10	Meriden, City of.....	10,000.00
5	Methuen, Town of.....	2,500.00
6	Malden, City of.....	6,000.00
10	Minneapolis, City of.....	10,000.00
1	Massachusetts, Commonwealth of..	5,000.00
3	Minneapolis Union R. R.....	3,000.00
7	N. Y., Lack. & Western.....	7,000.00
3	N. Y., N. H. & H. Railroad.....	3,000.00
5	N. Y., N. H. & H. Railroad.....	5,000.00
2	Newton, City of.....	2,000.00
1	Providence, City of.....	10,000.00
1	Providence, City of.....	1,000.00
1	Peabody, Town of.....	1,000.00
2	Quincy, City of.....	2,000.00
3	Saginaw, City of.....	3,000.00
5	San Francisco, City of.....	5,000.00
8	Stoughton, Town of.....	8,000.00
1	Toledo, City of.....	1,000.00
3	Trenton, City of.....	3,000.00
60%	U. S. Liberty Bonds.....	3,000.00

City Hall and Memorial Building Sinking Fund—Continued

No.	Securities	Amount
10	Waterbury, City of.....	5,000.00
5	Worcester Consolidated	5,000.00
6	Warwick, City of.....	6,000.00
Total Amount Securities.....		\$381,900.00
Cash		9,734.24
Total Value Fund.....		\$391,634.24

Jonathan Tyler Worthy Poor Fund

Deposited with the Washington Inst. for Savings, Book No. 23549.

Amount on deposit, Jan. 1, 1918..... \$10,000.00

Resolutions, numbered 14 and 74, passed by the City Council, May, 1878: "That the City of Lowell be appointed trustee of the sum of \$10,000.00, and that the City Treasurer is authorized to pay to the Ministry-at-Large the interest of said sum at the rate of 6 per cent. forever. Said sum to be used for the benefit of the worthy poor of the City. Said Ministry shall make an annual report of their dispensing said money to the City Council." This fund was restored in 1914, and City is paying 4 per cent. only.

Hapgood Wright Centennial Trust Fund

Resolution adopted by the City Council, March 14, 1876: "The sum of \$1,000.00 be accepted from Hapgood Wright, under the conditions specified by him, that the money be placed at interest for 50 years, and at the end of that time the interest to be spent by the City Council (by a two-third vote) for the benefit of the City or its citizens, but the original \$1,000.00 to be always kept on deposit and the interest only to be spent by the City Council at the end of each 50 years."

On hand Jan. 1, 1917..... \$5,233.77
Income earned during the year..... 210.13

On hand Dec. 31, 1917..... \$5,443.90

Securities

Lowell Inst. for Savings, Book No. 54679..... \$1,091.87
City Inst. for Savings, Book No. 39419..... 4,352.03
\$5,443.90

Thomas Nesmith Fund

\$25,000.00 Annual Interest, \$1,500.00

Resolution, numbered 57, passed by the City Council, November, 1870; "That the sum of \$25,000.00 be accepted by the City and that the interest, at the rate of 6 per cent., be paid to the trustees, and that they in turn pay to the Ministry-at-Large or to like people, as they may decide. Said sum to be used for people in temporary need of charity without distinction of race, color or religion. Trustees: A. K. Chadwick, A. G. Cumnock, Thos. Nesmith, G. R. Chandler, Treasurer. In case of a vacancy, the remaining trustees shall report to the Justice of the Court, who shall appoint a successor to fill said vacancy."

Carney Medal Fund

Received of James G. Carney, in 1858 and 1859, the amount of \$200, which is to remain a perpetual debt of the City forever; the interest to be applied in payment for the "Carney Medals" to the departments of the High School (annually).

For the information of the citizens of Lowell the Auditor respectfully refers them to the "Annual Report of the School Committee," for the year 1859, where all the correspondence between the donor and the recipient may be found.

Thomas Nesmith Fund

\$1,000.00 Annual Interest, \$60.00

Resolution, numbered 54, passed by the City Council, April, 1870; "That the City of Lowell be appointed trustee of the sum of \$1,000.00, and the City Treasurer is authorized to pay to the High Street Church the interest of said sum at the rate of 6 per cent. forever. Said sum to be used by the Pastor and Deacons of said Church to sustain the Sunday School and its library for the moral and religious instruction of the children."

Respectfully submitted,

CHAS. D. PAIGE,

Auditor.

March 28, 1918.

ACCOUNT OF THE CITY TREASURER AND COLLECTOR OF TAXES FOR THE YEAR 1917

Lowell, Mass., Jan. 1, 1918.

To the Municipal Council:

Gentlemen:—I have the honor to submit the following report of the Receipts and Expenditures of the City of Lowell for the financial year 1917:

Monthly Receipts as follows:

January	\$ 161,968.91	
February	136,296.10	
March	160,304.90	
April	1,072,329.35	
May	203,878.73	
June	265,984.76	
July	289,221.28	
August	422,049.00	
September	235,293.13	
October	1,561,698.43	
November	510,264.28	
December	246,247.21	
		<hr/>
		\$5,265,536.08
Cash balance Jan. 1, 1917...		314,254.24
		<hr/>
		\$5,579,790.32
		<hr/>

Monthly Payments as follows:

January	\$ 120,204.25	
February	211,686.72	
March	215,807.57	
April	289,757.67	
May	387,658.47	
June	290,680.81	
July	880,407.88	
August	298,213.78	
September	438,376.41	
October	392,473.10	
November	1,216,467.10	
December	448,263.99	
		<hr/>
		\$5,189,997.75
Cash balance Dec. 31, 1917..		389,792.57
		<hr/>
		\$5,579,790.32
		<hr/>

Respectfully submitted,

FRED H. ROURKE,

City Treasurer and Collector of Taxes.

TOTAL VALUATION AND CITY DEBT, 1917

Real Estate and Personal Property Owned by the City

Public Safety	\$ 82,500.00	\$ 364,200.00	\$ 446,700.00
Finance	8,600.00		8,600.00
Public Property	39,300.00	1,648,675.00	1,687,975.00
Streets and Highways....	117,000.00	45,000.00	162,000.00
Water and Fire.....	1,676,924.00	874,500.00	2,551,424.00
Schools	54,300.00	2,504,204.00	2,558,500.00
Cemetery	10,000.00	43,000.00	53,000.00
Park	10,000.00	743,475.00	753,475.00
Unclassified		10,525.00	10,525.00

Total Valuation \$8,232,199.00

Gross City Debt..... 4,744,496.30

Excess in Valuation of all City Property over the

Gross Debt of City..... \$3,487,702.70

PUBLIC SAFETY

Mayor	\$ 800.00
Health	15,000.00
Law	500.00
Police	35,000.00
State Aid	200.00
Charity Office	4,000.00

CITY HOSPITAL

	Bldgs. Value	Area	Land Value	Total Value
Chelmsford St. Hospital Buildings.....	\$176,100.00	45.73 acres	\$22,300.00	\$198,400.00
Land Chelmsford St.....		139,530 sq. ft.	2,800.00	2,800.00
Land "		176,300 "	3,500.00	3,500.00
Land "		10,305 acres	3,100.00	3,100.00
Land in Town of Chelmsford.....		28.08 "	8,400.00	8,400.00
Equipment	\$176,100.00		\$40,100.00	\$216,200.00
Contagious Hospital				\$ 27,000.00
				\$148,000.00

FINANCE

Auditor—Office	\$	500.00
Assessors “		500.00
Treasurer “		500.00
City Clerk “		500.00
Elections “		5,000.00
Registrars “		100.00
Supply “		500.00

STREETS AND HIGHWAYS

Streets	\$68,000.00
Sprinkling Streets	12,500.00
Sewers	21,000.00
Lighting Streets	10,000.00
Engineer	5,500.00
City Stable	40,000.00
Sprinkler Sheds	5,000.00

MISCELLANEOUS REAL ESTATE

	Area		Valuation
Tenth Street	40,260	sq. ft.	\$ 800.00
Tenth Street	175,985	“	3,500.00
Harris Land	28	acres	600.00
Parker Land	20	“	1,400.00
Hildreth Land	17	“	500.00
Meadow Land	5	“	275.00
Swan Land	5	“	200.00
S. S. Rogers Street.....	2.69	“	300.00
N. S. First Street.....	57,768	sq. ft.	1,500.00
Spruce Street	17,457	“	150.00
W. S. Billerica Road.....	145,513	“	400.00
Clark Road	3	acres	900.00
			<hr/>
			\$10,525.00
			<hr/>

PUBLIC PROPERTY AND LICENSES DEPARTMENT

Real Estate

	Buildings Value	Area	Land Value	Total Value
City Hall	\$410,000.00			
Memorial Building, Merrimack St., Colburn St., Moody St. and Worthen St.	200,000.00	61,280	\$122,550.00	\$732,550.00
Police Station, Market St.....	41,400.00			
City Scales	500.00			
Public Landing and Police Stable.....	2,500.00	16,345	57,200.00	
Land in Rear Market St.....		4,537	2,250.00	
Land in Rear Market St.....		4,382	2,200.00	106,050.00
Wooden Building (polling booth).....	300.00			
Wooden Building (Old Fire Station) ..	800.00			
Land, Fletcher, Willie and Cross Sts...				
Comfort Station, Paige St.....	25,000.00	5,150	2,050.00	3,150.00
Carriage Sheds	4,000.00	area in street		25,000.00
2½ Story Brick Building Office, Carpenter and Blacksmith Shop.....	8,000.00			
Land, Fletcher, Broadway and Large Sts.				
Brick Stable	35,000.00	72,500	25,400.00	37,400.00
Carriage Shed (brick and wood)	3,000.00			
Shed (wood)	2,500.00			

PUBLIC PROPERTY AND LICENSES DEPARTMENT, Real Estate—Continued

	Buildings Value	Area	Land Value	Total Value
2 Story Building (Sewer Dept.) wood..	\$ 2,500.00			
Shed	500.00			
Carpenter and 3 Story Brick Building..	18,000.00			
2 Story Wooden Building, carpenter storage	6,000.00			
Auto and Carriage Sheds, brick and wood	8,000.00			
Sheds	200.00			
Land, Fletcher, Cross and Broadway..		80,980	\$ 28,350.00	\$ 104,050.00
Rifle Range, Dracut.....	16,000.00		2,700.00	18,700.00
Magazine Building rear of Chelmsford St.	In ground	1.65	400.00	400.00
	\$829,200.00		\$243,100.00	\$1,072,300.00
Buildings Department			\$25,000.00	
License Commission			800.00	
Moths			2,000.00	
Messengers			4,400.00	
Weigher			500.00	
Sealer			1,200.00	
Wires			400.00	

FIRE DEPARTMENT—PERSONAL PROPERTY

	Valuation
Chief's Office	\$ 7,619.32
Repair Shop	579.00
Engine Co. No. 1, Gorham Street.....	8,767.13
“ No. 2, Branch Street.....	9,389.00
“ No. 3, Palmer Street.....	7,773.30
“ No. 4, High Street.....	5,172.50
“ No. 5, Mammoth Road.....	2,950.00
“ No. 6, Fletcher Street.....	6,592.60
Hose Co. No. 7, Central Street.....	2,566.95
“ No. 8, Merrimaek Street.....	2,000.85
“ No. 9, Lincoln Street.....	2,539.14
“ No. 10, Fourth Street.....	3,955.30
“ No. 11, Lawrence Street.....	1,966.60
“ No. 12, West Sixth Street.....	2,443.65
Hook & Ladder No. 1, Lawrence Street.....	2,429.25
“ No. 2, Westford Street.....	3,517.91
“ No. 3, Palmer Street.....	5,169.55
“ No. 4, West Sixth Street.....	6,559.78
Protective No. 1, Warren Street.....	4,327.60
Fire Alarm Telegraph.....	47,327.00
Total Fire Department Personal.....	<u>\$133,647.33</u>

AUDITOR'S REPORT.

157

FIRE DEPARTMENT

Real Estate

	Value Buildings	Area	Value Land	Total Value
Engine House, Gorham St.....	\$ 26,000.00	5,292 feet	\$ 1,300.00	\$ 27,300.00
Engine " Branch St.	18,000.00	8,829 "	3,500.00	21,500.00
Central Fire Station, Palmer St.....	60,000.00	2,248 {	6,750.00 {	96,050.00
		7,326 }	29,300.00 }	
Engine House, High St.....	25,000.00	5,565 "	1,950.00	26,950.00
Engine " Mammoth Road	14,500.00	5,341 "	850.00	15,350.00
Engine " Fletcher St.....	20,000.00	123,126 {	24,600.00 {	48,300.00
		18,985 }	3,700.00 }	
Engine " Central St.	10,500.00	3,500 "	2,100.00	12,600.00
Engine " Merrimack St.	23,000.00	3,060 "	5,800.00	28,800.00
Engine " Lincoln St.	6,000.00	1,930 "	150.00	6,150.00
Engine " Fourth St.	16,000.00	6,993 "	2,500.00	18,500.00
Engine " Lawrence St.	25,000.00	8,058 "	1,200.00	26,200.00
Engine " West Sixth St.....	38,000.00	9,390 "	650.00	38,650.00
Engine " Westford St.	18,000.00	4,610 "	1,400.00	19,400.00
Engine " Warren St.	11,000.00	1,645 "	1,650.00	12,650.00
	\$311,000.00		\$87,400.00	\$398,400.00

WATER WORKS DEPARTMENT

Real Estate

	Value Buildings	Area Right of way	Value Land	Total Value
Terminal Chamber (brick) Conduit St..	\$ 4,000.00			\$ 4,000.00
2 Small Brick Buildings, manhole and blow-off, Conduit St.....	1,000.00	“ “		1,000.00
Sarah Ave. and Moody St.....	1,000.00	28,072 sq. ft.	\$ 2,800.00	2,800.00
Brick Manhole Structure, White St....	1,000.00	5,833 “	300.00	1,300.00
Brick Monhole Structure, Moody St., Gershom and Gardner Aves.....	2,000.00	17,252 “	2,600.00	4,600.00
Fels Park	10,000.00	27,163 “	550.00	550.00
Inlet Chamber (brick) Varnum Ave....	10,000.00	15,540 “	1,550.00	11,550.00
Filter Basin between Varnum Ave. and River	8,000.00	166,320 “	5,000.00	13,000.00
Upper Pumping Station, Boulevard....	2,000.00			
Dwelling House, Boulevard.....	1,500.00			
Dwelling House, Boulevard.....	800.00	55,7878 acres	22,300.00	26,600.00
Cushing Farm Buildings, Varnum Ave.	1,200.00	33 “	6,600.00	7,800.00
Boulevard and Boulevard St.....	100,000.00	11 “	4,400.00	4,400.00
Pumping Station, West Sixth St.....	15,000.00			
Stable and Sheds.....	2,000.00	51,101 “	13,000.00	130,000.00
Store House and Sheds, West Sixth St., Hampshire St. and Jewett St.....	1,600.00	8,133 sq. ft.	2,450.00	4,050.00
House No. 40 West Sixth St.....				

WATER WORKS DEPARTMENT, Real Estate—Continued

	Value Buildings	Area	sq. ft.	Value Land	Total Value
High Service Reservoir, Mt. Pleasant St. In Town of Draut.....	\$ 15,000.00	54,730		\$ 1,100.00 }	\$ 16,750.00
Pumping Station and Chimney, Plain and Chelmsford Sts.....		32,470	"	650.00 }	
Plain and Chelmsford Sts.....	3,000.00	1,684,930	"	25,250.00 }	
In Town of Chelmsford.....		115,640	"	600.00 }	32,700.00
Low Service Reservoir (new).....	75,000.00	1,531,109	"	3,850.00 }	
Low Service Reservoir.....	70,000.00				
Dwelling House	1,000.00				
Gate House, Beacon St.....	10,000.00	651,600	"	32,600.00	188,600.00
Lower Pumping Station.....	25,000.00				
Wooden Building, Boulevard.....	500.00	2,250	acres	900.00	26,400.00
	\$349,600.00			\$126,500.00	\$476,100.00
Personal Property					
Pumps, Engines, Machinery, Pipes, Conduits Mains and other Personal Property.....					\$1,553,276.67

SCHOOL DEPARTMENT

Real Estate

	Value Buildings	Area	Value Land	Total Value
High School, Kirk and Anne Sts.....	\$200,000.00	31,194	\$32,000.00	\$232,000.00
High School Annex, John and Paige Sts.	79,000.00	16,737	25,100.00	104,100.00
High School (overflow) Kirk St.....	10,000.00	22,816	18,000.00	28,000.00
Bartlett School (new) Wannalanait St.	110,000.00	68,418	10,250.00	120,250.00
Bartlett School (old) Clark St.....	17,000.00	10,000	3,000.00	20,000.00
Butler School, Gorham St.....	65,000.00	25,620	5,100.00	70,100.00
Colburn School, Lawrence St.....	20,000.00	17,557	3,500.00	23,500.00
Edson School, Highland and South Sts.	20,000.00	Ld. taken with So. Common		20,000.00
Franklin School, Branch St.....	15,000.00	20,011	14,000.00	29,000.00
Green School, Merrimack St.....	60,000.00	19,562	47,900.00	107,900.00
Greenhalge School, Ennell St.....	125,000.00	100,000	7,000.00	132,000.00
Highland School, Pine St.....	65,000.00	53,924	8,000.00	73,000.00
Lincoln School, Chelmsford St.....	100,000.00	44,451	4,450.00	104,450.00
Mann School, Broadway (brick).....	8,000.00			
Wooden Building, Broadway.....	4,000.00	15,532	11,700.00	23,700.00
Moody School (new) Rogers St.....	75,000.00	51,226	10,250.00	85,250.00
Moody School (old) East Merrimack and High Sts.....	18,000.00	9,500	5,700.00	23,700.00
Pawtucket School, Mammoth Road...	47,000.00	36,160	5,800.00	52,800.00
Riverside School, Woburn St.....	25,000.00	33,900	1,350.00	
		3,550	150.00	26,600.00
		11,724	100.00	
Varnum School, Myrtle St.....	100,000.00	47,625	10,950.00	110,950.00
Washington School, Lang St.....	90,000.00	72,240	2,890.00	92,890.00
Agawam School, Agawam St. (Primary)	8,000.00	13,184	1,600.00	9,600.00
Ames St. Primary.....	12,000.00	8,539	2,500.00	14,500.00

SCHOOL DEPARTMENT, Real Estate—Continued

AUDITOR'S REPORT.

161

	Value Buildings	Area	Value Land	Total Value
Billings St. Primary.....	\$15,000.00	20,000	sq. ft.	\$16,000.00
Central St. ".....	10,000.00	13,693	"	14,100.00
Cabot St. ".....	20,000.00	9,625	"	25,300.00
Carter St. ".....	50,000.00	18,908	"	52,650.00
Cheever St. ".....	8,000.00	10,000	"	12,000.00
Chapel St. ".....	4,000.00	Taken with Central St. Primary		4,000.00
Charles St. ".....	12,000.00	11,100	sq. ft.	16,450.00
Cottage St. ".....	5,000.00	5,260	"	6,600.00
Colburn " Charles St.....	22,000.00	9,857	"	25,450.00
Cross St. ".....	22,000.00	8,048	"	24,000.00
Dover St. ".....	8,500.00	17,927	"	13,000.00
Favor St. ".....	23,000.00	8,500	"	28,100.00
Fayette St. ".....	2,000.00	7,428	"	4,600.00
Grand St. ".....	3,000.00	4,255	"	4,300.00
High St. ".....	8,000.00	9,220	"	11,700.00
Howard St. ".....	3,500.00	6,944	"	4,900.00
Kirk St. ".....	12,000.00	6,120	"	18,100.00
Lakeview Ave. ".....	7,500.00	10,232	"	9,500.00
Lexington Ave. ".....	7,000.00	12,000	"	7,350.00
London St. ".....	4,000.00	10,065	"	4,700.00
Lyon ".....	18,000.00	10,730	"	20,700.00
House 16 Lyon and School Building...	2,500.00	6,000	"	3,500.00
Mammoth Road Kindergarten.....	2,000.00	3,507	"	2,450.00
Middlesex Village Primary.....	16,000.00	19,120	"	16,750.00
Moody St. Primary.....	18,000.00	30,400	"	19,200.00
Morrill School, Common St.....	21,000.00	9,040	"	24,150.00

SCHOOL DEPARTMENT, Real Estate—Continued

	Value Buildings	Area	sq. ft.	Value Land	Total Value
Laura E. Lee School.....	\$ 20,500.00	16,239		\$ 2,450.00	\$ 22,950.00
Powell St. Primary.....	6,500.00	11,367		1,350.00	7,850.00
Old Middlesex Village primary (un- used) Hadley St.....	1,000.00	6,444		200.00	1,200.00
Pond St. Primary.....	7,000.00	9,880		3,950.00	10,950.00
Pine St.	18,000.00	26,603		3,200.00	21,200.00
School St. (unused) Primary.....	4,500.00	8,869		2,650.00	7,150.00
Sycamore St. Primary.....	12,000.00	19,046		550.00	12,550.00
Tenth St.	8,900.00	10,730		2,150.00	11,050.00
Weed St.	10,000.00	18,903		1,900.00	11,900.00
West London St. Annex Primary.....	2,000.00	15,211		750.00	2,750.00
West Sixth St. Primary.....	7,000.00	12,913		1,900.00	8,900.00
Worthen St.	20,000.00	11,044		8,300.00	28,300.00
High School Land.....	\$1,714,400.00			\$326,190.00	\$2,040,590.00
Greenhalge School					227,614.00
					136,000.00
					\$2,404,204.00

Personal Property

Furniture in Schools, etc..... \$54,300.00

Determined on factor basis of a certain valuation per room.

PARK DEPARTMENT

Real Estate

AUDITOR'S REPORT.

163

	Bldg. Value	Acre	Fect	Land Value	Total Value
Belvidere Park			74,275	\$ 29,700.00	\$ 29,700.00
Coburn Square			10,989	1,000.00	1,000.00
Colonial Ave., Riverbank			152,400	leased	leased
Fort Hill Park		34.40		154,800.00	154,800.00
Glacial Oval			690	100.00	100.00
Harris Oval			5,000.00	500.00	500.00
Hillside Park			2,669	250.00	250.00
Hovey Square			945	150.00	150.00
Hutchinson Square			1,416	150.00	150.00
Lenox Square, Barn			7,915	800.00	1,500.00
Lincoln Square	\$700.00		600	150.00	150.00
Lucy Larcom Park			21,970	leased	leased
Mansur Square			1,743	175.00	175.00
Middlesex Square			1,514	200.00	200.00
Monument Square			3,928	15,700.00	15,700.00
Mt. Vernon Park			25,902	4,000.00	4,000.00
North Common		11.39		125,300.00	125,300.00
Parker Spaulding Park			2,215	200.00	200.00
Penniman Square			975	250.00	250.00
Princeton Square			1,210	150.00	150.00
Shedd Park		56.00		44,800.00	44,800.00
South Common			911,653	227,900.00	227,900.00
Tyler Park			78,919	8,000.00	8,000.00
Water Works Square			2,050	500.00	500.00
Varnum Ave. Riverbank			19,860	leased	leased
Varnum Ave. Park				31,100.00	31,100.00
Fairground Park				20,000.00	20,000.00
Cardinal O'Connell Park				71,000.00	71,000.00
Varnum Park			5,882	5,900.00	5,900.00
	\$700.00				\$743,475.00

LAND OWNED BY THE CITY FOR BURIAL PURPOSES

Date	Location	Grantee	Area	Price	Grantor
Nov. 5, 1810	School St. †1	Inhabitants of Chelmsford	1 acre 23 rods	\$ 23.00	Joel Spaulding
Mar. 31, 1832	Gorham St. †2	136 rods in Chelmsford	4 acres 81 rods	428.00	Simon and Susanna Parker
Nov. 16, 1846	“ †3	see below	30 acres	1,500.00	William and Hannah Spence
Nov. 25, 1893	“ †3	Taken by resolution, Nov. 17, 1893, J. J. Pickman, Mayor	112,980 sq. ft. 13,846 “ 10,527 “ 137,353 “ or 3.1 acres	4,236.75 692.30 526.35	Mary and John Gannon William B. Spaulding J. J. Donovan
1893	“ †3	Taken by resolution, Sept. 10, 1891, Geo. W. Fifield, Mayor	44,139 sq. ft. 88,428 “ 133,606 “ 266,173 “ or 6.1 acres	(a) 1,800.00 “ 3,290.00 “ 6,056.95	Sever Ohlson Charles D. Starbird William Manning
July 20, 1893	“ †3 annex			50.00	Sever Ohlson
1899	“ †3		18,972 acres	5,691.60	Chas. W. and Sarah Swan
Dec. 17, 1877	“ *		7 acres	2,000.00	T. McOwen

†1 is the Cemetery on School Street.

†2 is the old Cemetery on Gorham Street.

†3 is the new Cemetery on Gorham Street, known as the Edison Cemetery.

* January, 1878, \$400.00 was returned to the City on purchase McOwen land, reducing cost to \$1,600.00.

(a) Paid on execution.

Valuation

School Street	\$ 8,000.00
Gorham Street	35,000.00
Personal Property	\$43,000.00 \$10,000.00

HIGH STREET CHURCH CLOCK

The clock was built in 1861 under the direction of Mr. George Hedrick. It was to be paid for by popular subscription, but after some time Mr. Hedrick was obliged to make the final payments and it became his property. In 1877 the City Government, by resolution, purchased the clock of Mr. Hedrick. The terms of purchase required the City to keep it in repair at the High Street Church.

COST OF CITY HALL AND MEMORIAL BUILDING

1889-1895—Cost of City Hall.....	\$382,317.48
1889-1895—Cost of Memorial Building.....	175,928.45
Land and Curbing.....	17,219.43
Total	<u>\$575,465.36</u>

PAYMENTS MADE TO SINKING FUNDS IN 1917

	Amount	Fund
City Hall and Memorial Buildings, due 1920	\$ 7,500.00	\$ 450,000.00
High School, due 1921.....	3,000.00	150,000.00
New School Houses, due 1926.....	4,000.00	200,000.00
Water Loans, due 1920.....	16,000.00	1,000,000.00
	<u>\$30,500.00</u>	<u>\$1,800,000.00</u>

PROPERTY EXEMPT FROM TAXATION

	Personal Valuation	Real Estate Valuation	Totals
Literary Institutions	\$ 140,846.90	\$ 466,895.00	\$ 697,641.90
Temperance Institutions	3,365.85	16,350.00	19,715.85
Benevolent Institutions	35,423.62	97,750.00	133,173.62
Charitable Institutions	873,222.67	487,440.00	1,360,662.77
Scientific Institutions	406,420.29	486,650.00	893,070.29
Houses of Religious Worship		2,322,750.00	2,322,750.00
	<u>\$1,459,279.43</u>	<u>\$3,877,835.00</u>	<u>\$5,327,114.43</u>

The total real estate area exempt, 115,806.1000 acres.

LOANS NEGOTIATED BY THE CITY SINCE 1900 AND HOW EXPENDED

Year	Loans	Improvements	Current Expenses	Waterways
1900	\$288,500.00	\$191,000.00	\$ 22,500.00	\$ 75,000.00
1901	256,100.00	206,100.00	50,000.00	
1902	222,885.00	186,385.00	36,500.00	
1903	387,320.00	183,820.00	203,500.00	
1904	254,414.00	167,714.00	86,700.00	
1905	360,150.00	232,150.00	128,000.00	
1906	247,460.00	149,440.00	71,000.00	27,000.00
1907	365,500.00	229,500.00	136,000.00	
1908	304,413.00	189,413.00	115,000.00	
1909	172,900.00	172,900.00	none	
1910	241,000.00	161,000.00	20,000.00	60,000.00
1911	412,450.00	251,450.00	61,000.00	100,000.00
1912*	546,700.00	230,700.00	241,000.00*	75,000.00
1913	542,700.00	320,700.00	147,000.00	75,000.00
1914	343,500.00	253,500.00	none	90,000.00
1915	493,000.00	34,300.00	none	150,000.00
1916	647,100.00	592,100.00	none	55,000.00
1917	780,000.00	780,000.00	none	

Temporary Loan Deficiencies of previous years — \$200,000.

EXPENDITURE, TAX RATE, VALUATION FROM 1860

Year	Expenditures	Tax Rate	Total City Valuation
1860	\$ 267,192.07	\$ 8.40	\$22,125,176.00
1865	756,342.81	14.60	21,076,360.00
1870	778,636.03	13.90	25,972,488.00
1875	1,162,922.95	16.20	38,690,495.00
1880	1,398,683.48	16.20	41,102,016.00
1885	1,833,483.69	16.20	51,351,780.00
1890	3,613,584.04	16.00	62,353,612.00
1895	2,903,410.60	18.00	68,885,732.00
1900	2,353,844.41	18.80	71,529,515.00
1905	2,738,502.84	20.20	71,645,718.00
1906	2,795,000.75	19.60	74,945,640.00
1907	2,718,874.34	19.40	76,079,750.00
1908	3,046,987.96	20.40	77,855,891.85
1909	2,791,607.95	19.60	79,695,960.00
1910	2,887,399.24	19.60	80,392,890.00
1911	2,873,195.26	18.90	82,772,900.00
1912	2,847,482.13	19.00	85,384,085.00
1913	3,112,853.71	19.40	87,872,600.00
1914	3,093,197.15	21.90	90,039,890.00
1915	3,207,407.84	20.80	82,954,197.00
1916	3,443,043.82	21.20	94,503,423.00
1917	3,835,043.80	23.40	90,820,901.50

INSURANCE PREMIUMS 1917

City Buildings	\$1,342.16
School Buildings	1,892.56
Dept. of Building	134.00
Parks	109.80
Police	124.00
Charity	670.17
Health	306.50
Street	298.10
Water	499.00
	<hr/>
	\$5,377.09

DUMMER STREET EXTENSION

Land Damages	\$59,641.98
Paving Parkway	10,359.32
Miscellaneous Items	998.10
	<hr/>
Loan	\$71,000.00

ISOLATION HOSPITAL, JULY 1-18

Land	\$ 7,593.19
Buildings	148,069.45
Furnishings	16,300.00
	<hr/>
	\$222,633.83

LOANS

Buildings	\$225,000.00
Furnishings	24,000.00
	<hr/>
	\$249,000.00

SALE BUILDINGS, DUMMER STREET

Receipts	\$577.50
Expenses	425.20
	<hr/>
Balance Unexpended Jan. 1, 1918.....	\$152.30

NEW HIGH SCHOOL ACTS 1915

	Dr.	Cr.
1915 October 9, Loan.....		\$125,000.00
1916 February 29, Loan.....		100,000.00
1917 April 3, Loan.....		75,000.00
Sale of Buildings, Receipts.....		4,542.50
		<hr/>
		\$304,542.50
1915 Expenses	\$ 11,002.44	
1916 Expenses	199,676.07	
1917 Expenses	16,936.16	
	<hr/>	227,614.67
		<hr/>
Balance Jan. 1, 1918.....		\$ 76,927.83

CLASSIFICATION OF EXPENSES

Paid for	
Land	\$180,264.16
Advertising	203.52
Auctioneer	338.85
Titles and Recording.....	1,038.95
Engineering	461.60
Labor and Services.....	1,769.42
Architects	13,208.33
Steel	27,082.81
Teaming, Hardware, etc.....	3,247.03
	<hr/>
Total	\$227,614.67

STATISTICS ON BRIDGES CROSSING THE MERRIMACK RIVER AT LOWELL

Pawtucket Bridge, 1782

Year 1782, the Merrimack River Bridge, built of wood at Pawtucket Falls, costing \$8,000.00.

Year 1804, Pawtucket Falls Bridge rebuilt with stone abutments, costing \$14,000.00.

Year 1871-2, Pawtucket Falls Bridge rebuilt with iron and stone abutments, costing \$40,135.66, by Blodgett & Curry. Of this amount \$18,000.00 was paid by the Town of Dracut.

Other Bridges on the Merrimack River

Centralville Bridge, burned August 5, 1882, was rebuilt by The Morse Bridge Co. in 1882-3, at a cost of \$118,265.92.

Aiken Street Bridge, built by the Cunningham Metal Co. in 1882-3, costing \$171,635.00.

Moody Street Bridge, built by the Groton Bridge Co. in 1895-6, costing \$88,698.90.

Pawtucket Falls Bridge, 1916-7-8

Loan June 1, 1916.....	\$125,000.00
Received from Bay State Railway Co.....	5,000.00
Loan 1917	24,000.00
	<hr/>
Total Appropriated	\$154,000.00
Expended—	
National Engineering Co.....	\$134,542.84
Mr. Denman	1,600.00
G. F. Swain.....	850.00
J. R. Worcester Co.....	3,005.16
Engineers' Dept.	5,331.20
Okonite Cable Co.....	121.50
Laying Fire Cable.....	1,624.09
Laying Water Pipe.....	6,451.56
Advertising, Hardware, etc.....	473.65
	<hr/>
	\$154,000.00

\$2,500.00 paid National Engineering Co. in May, 1917—final payment.

REPORT OF AN AUDIT

ACCOUNTS

OF THE

CITY OF LOWELL, MASS.

FOR YEAR ENDING

DECEMBER 31, 1917

MADE BY

EVERETT E. TARBOX

CERTIFIED MUNICIPAL ACCOUNTANT

BOSTON, MASS.

EVERETT E. TARBOX,
Expert Municipal Accountant,
Boston, Mass.

Hon. James E. Donnelly,
Commissioner of Finance,
of the City of Lowell.

Sir:—

In accordance with your instructions I have made an examination of the books, and an audit of the accounts of the City of Lowell, for the fiscal year ending December 31st, 1917, as required by the provisions of Section 35 of the City Charter, adopted November 7th, 1911.

The financial records of every City Department were examined, checked and verified, and compared with the books of the City Auditor, and a proof obtained of the entire cash receipts and disbursements of the City Treasurer's office during the fiscal year of 1917, as recorded on his cash books.

Bills for services rendered or materials furnished were listed and checked, and collections were checked with the various departmental accounts; all warrants drawn upon the Treasurer were examined and checked with the Treasurer's books.

Owing to the double entry system of accounting installed in the City Auditor's office, together with its automatic checks on the finances of all other City Departments, it is now possible, in auditing the City's accounts, to definitely prove the receipts and disbursements of the City Treasurer, by comparing the detailed accounts of each department with the totals of the City Auditor's books; because if the Auditor's general ledger is in balance, and the Treasurer's cash balance agrees with the Auditor's ledger, an automatic basis of proof is established, and all departmental accounts must agree with the records of these two offices, or the fact is immediately and automatically established that an error has been made which must be corrected.

In comparison with municipalities in which the writer has had personal experience, the accounts of the City of Lowell are in excellent condition, and the financial records are kept in a careful and systematic manner.

Some clerical errors are bound to occur in the operation of any business having the multitudinous detail that surrounds the financial transactions of the City of Lowell during one fiscal year; but these errors were comparatively few, and were corrected as discovered, during the course of the annual audit.

A summary of the financial transactions of the various City Departments, covering the entire operations of the fiscal year of 1917, as examined and proved, is herewith presented, including trust funds and sinking funds.

A balance sheet, made from audited figures, is appended to this report, showing the financial condition of the City on December 31st, 1917, including both its revenue and non-revenue assets and liabilities.

Municipal Council:—Appropriations, transfers of appropriations, and loans authorized during the year 1917 were listed from the City

Clerk's records of orders and resolutions passed, and checked to the Auditor's journal and general ledger; and were found to have been correctly entered.

Loans authorized during the year were as follows:

Order No.	Purpose	Amount
11	Sewer Construction	\$ 60,000.00
51	Paving Construction	50,000.00
55	Acquiring Land for High School.....	75,000.00
82	Sidewalk Construction	10,000.00
102	Macadamizing	70,000.00
115	Isolation Hospital	75,000.00
159	Pawtucket Falls Bridge.....	24,000.00
193	Isolation Hospital	100,000.00
229	German War Relief.....	50,000.00
233	Land for Parks.....	20,000.00
259	School House Construction.....	10,000.00
262	School House Construction.....	170,000.00
297	Isolation Hospital	24,000.00
321	Sewer Construction	15,000.00
Total authorizations		<u>\$753,000.00</u>

These loans were all negotiated by the Treasurer during the year, and, in addition, two loans authorized during the previous year, amounting to \$27,000.00, were negotiated, making a total of \$780,000.00, which was actually borrowed by the Treasurer during the year 1917.

The following table shows a summary of the total appropriations from revenue made by the Council during the year:

Annual Budget Appropriations.....	\$2,412,880.12
Additional Appropriations, as follows:	
Auditing City Books.....	1,300.00
Restoring Bartlett School Contents.....	4,515.15
Entertaining Enlisted Soldiers.....	3,000.00
Land for Isolation Hospital.....	2,800.00
Commissioners' Fund	2,000.00
Mothers of Dependent Children.....	650.00
Charity	5,000.00
Parks, Chapter 321, Sec. 1, Acts of 1917..	1,370.00

State and County Assessments:

State Tax	\$211,860.00
State Highway Tax.....	1,325.00
Grade Crossings	4,677.38
Non-Resident Bank Tax.....	11,927.13
County Tax	96,893.18

Total Assessments 326,682.69

Total Revenue Appropriations and Assessments \$2,760,197.96

Mayor's Department:—The only receipts for which the Mayor's office is directly responsible are for the issuance of licenses for Sunday amusements. The records of the office showed that licenses were issued during the year amounting to \$3,562.00, and this was duly paid to the Treasurer and reported to the Auditor.

Auditor's Department:—The books and accounts kept by the City Auditor were examined and checked in detail. The accounts were in excellent condition and readily proved. The financial records of all other City Departments were verified by a comparison with them and with the City Treasurer's cash books.

Pay-rolls and bills approved for payment by the Committee on Accounts were duly checked and compared with the City Auditor's books.

The Auditor's Appropriation Ledger was checked in detail, and the total transactions of every account were listed, showing appropriations, receipts credited to appropriations, transfer credits and debits, both municipal and departmental, payments of cash, and the appropriation balances of each account at the end of the fiscal year. These totals proved to agree with the authorizations of the Municipal Council, the payments of the City Treasurer, and the City Auditor's general ledger controlling account.

The Auditor's Accounts Receivable Ledger, showing the details of all departmental accounts receivable, was examined and verified.

The outstanding accounts of every department were listed and reconciled to the accounts as shown in the Auditor's subsidiary ledger of Accounts Receivable.

The Auditor's general ledger was examined and checked in detail, and a trial balance drawn off, which proved to be in balance.

The following table shows a classified summary of the total cash receipts during the year, and the total revenue and non-revenue payments made during the year by the Treasurer's office, as revealed by an examination of the records of all departments, checked to the City Auditor's books.

The addition to these totals of the cash on hand at the beginning and end of the year reveals a proof of the total transactions of the Treasurer's office and his cash balance on January 1st, 1918.

CITY OF LOWELL

Summary of Cash Receipts and Payments, 1917

Receipts	Payments
Taxes .....\$2,501,612.53	Revenue Appropria-
Licenses and Permits 160,145.75	tions .....\$3,180,024.77
Fines and Forfeits.. 6,132.94	Non-Revenue Appro-
Grants and Gifts... 3,599.78	priations 602,551.99
Special Assessments. 41,484.83	Temporary Tax
General Government. 3,292.23	Loans 1,400,000.00
Protection of P. & P. 5,087.80	Trust Funds 7,215.00
Health & Sanitation 7,423.02	Tax Titles 205.99
Highways 3,833.36	
Charities 7,925.48	
Soldiers' Benefits .. 15,488.80	
Education 27,963.34	
Recreation and Un-	
classified 6,425.15	
Public Service Enter-	
prise 272,099.51	
Cemeteries 11,756.05	
Debt and Interest... 2,175,862.65	
Agency and Trust.. 11,676.44	
Refunds 3,726.42	
<hr/> Total Receipts ...\$5,265,536.08	<hr/> Total Payments ..\$5,189,997.75
Cash on hand Janu-	Cash on hand De-
ary 1, 1917..... 314,254.24	cember 31, 1917... 389,792.57
<hr/> \$5,579,790.32	<hr/> \$5,579,790.32

Treasurer's and Collector's Department:—The books and accounts of the Treasurer were checked and verified; all cash transactions were compared with the Auditor's ledger.

Cash receipts were proved by the records of the various other City Departments, in comparison with the books of the City Auditor, including both receipts collected by the Treasurer in payment of accounts receivable, and also collections made by other departments direct, for which no bills were sent out.

During the year 1917 this office was administered in a thoroughly efficient and businesslike manner, and many improvements were made in recording the various financial transactions, with the result that information regarding the City's funded debt and sinking funds may be more readily obtained and systematically proved.

Interest on bank deposits has now been made an actual receipt of the department. All City depositories are requested to fill out a prepared form monthly, showing the daily cash balances and the amount of interest due the City on same at the end of each month. This prepared form is sent to the Treasurer on the first of every month, together with a check covering the amount due the City, as shown by the statement.

Co-operation on the part of this department with other City Departments is excellent, and the details of the numerous financial transactions are promptly and systematically performed.

The cash on hand in the Treasurer's office was personally counted on February 21st, 1918, and a reconciliation effected back to January 1st, 1918, as follows:

Cash in Drawer.....	\$ 1,793.19
Cash in Safe.....	5,150.38

Cash in Banks (per cash book):

Lowell Trust Co.....	\$58,561.08
Union National Bank.....	58,181.02
Old Lowell National Bank.....	58,620.86
Middlesex Trust Co.....	58,266.24
Appleton National Bank.....	58,492.92
Wamesit National Bank.....	58,574.53
First National Bank of Boston....	93.05
Old Colony Trust Co. of Boston....	446.00

Total Cash in Banks.....	352,235.70
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Total cash balance on hand February 21st, 1918.	\$359,179.27
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RECONCILIATION

Cash on hand January 1st, 1918....	\$389,792.57
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Receipts:

Month of January.....	126,097.76
February 1 to 21, inclusive.....	442,015.45

Payments:

Month of January.....	\$333,899.50
February 1 to 21, inclusive.....	264,827.01

Cash on hand February 21st as above	359,179.27
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\$957,905.78	\$957,905.78
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PROOF OF BANK BALANCES

The bank balances as shown on Treasurer's cash book, when cash was counted and balanced, February 21st, 1918, were proved and reconciled to the bank statements dated February 1st as follows:

Depository	Bank Statement	Treasurer's Books	Outstanding Checks	January Interest
Lowell Trust Co.....	\$23,002.16	\$22,561.08	\$ 441.08	
Union National Bank.	44,710.73	38,254.63	6,378.73	\$ 77.37
Old Lowell Nat. Bank.	25,107.38	22,620.86	2,486.52	
Middlesex Trust Co...	26,714.15	22,460.22	4,253.93	
Appleton Nat. Bank..	22,492.92	22,492.92		
Wamesit Nat. Bank..	22,574.53	22,574.53		
First Nat. Bank, Boston	991.72	929.92		61.80
	\$165,593.59	\$151,894.16	\$13,560.26	\$ 139.17
		13,560.26	Outstanding Checks	
		139.17	Interest Credited	
			In February	
	\$165,593.59	\$165,593.59		

RECONCILIATION OF BANK ACCOUNTS**February 1 to February 21, 1918**

Depository	Bank Balance February 1	Deposits Feb. 1-21	Checks Drawn February 1-21	Treas. Bal. Feb. 21
Lowell Trust Co.....	\$ 22,561.08	\$ 50,000.00	\$ 14,000.00	\$ 58,561.08
Union National Bank.	38,254.63	100,409.12	79,482.73	59,181.02
Old Lowell Nat. Bank	22,620.86	50,000.00	14,000.00	58,620.86
Middlesex Trust Co...	22,460.22	123,000.00	87,193.98	58,266.24
Appleton Nat. Bank..	22,492.92	50,000.00	14,000.00	58,492.92
Wamesit Nat. Bank..	22,574.53	50,000.00	14,000.00	58,574.53
First Nat. Bank, Boston	929.92	385,163.13	386,000.00	93.05
Old Colony Trust Co..		446.00		446.00
	<hr/>	<hr/>	<hr/>	<hr/>
	\$151,894.16	\$809,018.25	\$608,676.71	\$352,235.70
		151,894.16	352,235.70	
		<hr/>	<hr/>	
		\$960,912.41	\$960,912.41	

The following table shows the entire receipts and disbursements of the Treasurer's office during the year, by months, and the total amounts added to the cash on hand at the beginning and end of the year, show that the balances were correct:

January	\$ 161,968.91	\$ 120,204.25
February	136,296.10	211,686.72
March	160,304.90	215,807.57
April	1,072,329.35	289,757.67
May	203,878.73	387,658.47
June	265,984.76	290,680.81
July	289,221.28	880,407.88
August	422,049.00	298,213.78
September	235,293.13	438,376.41
October	1,561,698.43	392,473.10
November	510,264.28	1,216,467.10
December	246,247.21	448,263.99
	<hr/>	<hr/>
	\$5,265,536.08	\$5,189,997.75

Proof

Cash on hand January 1st.....	\$ 314,254.24	
Receipts as above.....	5,265,536.08	
Disbursements as above.....		\$5,189,997.75
Cash on hand December 31st...		389,792.57
	<hr/>	<hr/>
	\$5,579,790.32	\$5,579,790.32

The following tables show the total transactions for the year on account of taxes, street sprinkling, moth, sewer and sidewalk assessments, including cash receipts, abatements, and the uncollected accounts on December 31st and a proof of same. Verification notices were sent to a list of taxpayers, and no replies received indicated that any payments had been made to the Collector other than those shown on his books.

TAXES 1911

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	434.00
No collections and no abatements during year.		
Uncollected Dec. 31, 1917 (per detailed list) ..		434.00

TAXES 1914

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	15,155.75
Collections Jan. 1 to Dec. 31, 1917.....	\$	310.40
Abatements Jan. 1 to Dec. 31, 1917.....		14,559.75
		<hr/>
		14,870.15
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$	285.60

Proof

Uncollected April 1, 1918 (per detailed list) ..	\$	185.96
Collections Jan. 1 to April 1, 1918.....		99.64
		<hr/>
	\$	285.60

STREET SPRINKLING 1914

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	18.56
No collections or abatements during year.....		
Uncollected Dec. 31, 1917 (per detailed list) ..		18.56

MOTH 1914

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	.15
No collections or abatements during year.....		
Uncollected Dec. 31, 1917 (per detailed list) ..		.15

TAXES 1915

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$204,916.56
Collections Jan. 1 to Dec. 31, 1917.....	\$190,040.88
Abatements Jan. 1 to Dec. 31, 1917.....	462.72
	<hr/>
	190,503.60
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$ 14,412.96

Proof

Uncollected June 7, 1918 (per detailed list) ...	\$ 14,018.16
Collections Jan. 1 to June 7, 1918.....	384.40
Abatements Jan. 1 to June 7, 1918.....	2.00
Undetected error	14.50
	<hr/>
	\$ 14,419.06
Less overpayments	6.10
	<hr/>
	\$ 14,412.96

STREET SPRINKLING 1915

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	3,960.87
Collections Jan. 1 to Dec. 31, 1917.....	\$	3,924.38
Abatements Jan. 1 to Dec. 31, 1917.....		20.62
		<hr/>
		3,945.00
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$	<hr/> 15.97

Proof

Uncollected April 1, 1918 (per detailed list)...	\$	14.60
Collections Jan. 1 to April 1, 1918.....		1.32
		<hr/>
	\$	15.92
Less undetected error.....		.05
		<hr/>
	\$	15.87

MOTH 1915

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	593.70
Collections Jan. 1 to Dec. 31, 1917.....	\$	591.55
Abatements Jan. 1 to Dec. 31, 1917.....		.90
		<hr/>
		592.45
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$	<hr/> 1.25

Proof

Uncollected April 1, 1918 (per detailed list)...	\$	1.75
Less overpayment No. 26788.....		.50
		<hr/>
	\$	1.25

TAXES 1916

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	543,858.95
Collections Jan. 1 to Dec. 31, 1917.....	\$	327,954.04
Abatements Jan. 1 to Dec. 31, 1917.....		5,250.83
		<hr/>
		333,204.87
Uncollected Dec. 31, 1917 (per Auditor's ledger)		<hr/> \$210,654.08

Proof

Uncollected March 12, 1918 (per detailed list)	\$	178,028.53
Abatements Jan. 1 to March 12, 1918.....		39.92
		<hr/>
		\$210,702.20
Less overpayments	\$	4.32
Less undetected error.....		43.80
		<hr/>
		48.12
		<hr/>
		\$210,654.08

STREET SPRINKLING 1916

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	7,451.60
Collections Jan. 1 to Dec. 31, 1917.....	\$	3,785.69
Abatements Jan. 1 to Dec. 31, 1917.....		24.68
		<hr/>
	\$	3,810.37
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$	3,641.23

Proof

Uncollected March 12, 1918 (per detailed list)	\$	3,091.10
Collections Jan. 1 to March 12, 1918.....		549.15
Undetected error		1.00
		<hr/>
	\$	3,641.25
Less overpayment .....		.02
		<hr/>
	\$	3,641.23

MOTH 1916

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$	944.80
Collections Jan. 1 to Dec. 31, 1917.....	\$	487.53
No abatements		
		<hr/>
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$	457.27

Proof

Uncollected March 12, 1918 (per detailed list)	\$	380.22
Collections Jan. 1 to March 12, 1918.....		77.05
		<hr/>
	\$	457.27

TAXES 1917

Committment (per Auditor's ledger).....	\$2,188,092.97
Supplementary Committment	5,465.59
	<hr/>
	\$2,193,558.56
Collections Jan. 1 to Dec. 31, 1917.....	\$1,649,903.19
Abatements Jan. 1 to Dec. 31, 1917.....	3,760.36
	<hr/>
	1,653,663.55
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$ 539,895.01

Proof

Uncollected March 15, 1918 (per detailed list)	\$414,061.82	
Collections Jan. 1 to March 15, 1918.....	124,553.01	
Abatements Jan. 1 to March 15, 1918.....	1,335.60	
	<u>\$539,950.43</u>	
Less overpayment	\$.02	
Less undetected error.....	55.40	
	<u>55.42</u>	
		<u>\$539,895.01</u>

STREET SPRINKLING 1917

Committment (per Auditor's ledger).....	\$ 22,909.08	
Collections Jan. 1 to Dec. 31, 1917.....	\$ 15,586.36	
Abatements Jan. 1 to Dec. 31, 1917.....	96.03	
	<u>\$ 15,682.39</u>	
Uncollected Dec. 31, 1917 (per Auditor's ledger)	\$ 7,226.69	

Proof

Uncollected March 15, 1918 (per detailed list)	\$ 6,031.10	
Collections Jan. 1 to March 15, 1918.....	1,193.93	
Abatements Jan. 1 to March 15, 1918.....	3.06	
	<u>\$ 7,228.09</u>	
Less undetected error.....	1.40	
	<u>\$ 7,226.69</u>	

MOTH 1917

Committment (per Auditor's ledger).....	\$ 2,138.25	
Collections Jan. 1 to Dec. 31, 1917.....	\$ 1,326.23	
Abatements Jan. 1 to Dec. 31, 1917.....	36.70	
	<u>1,362.93</u>	
		<u>\$ 775.32</u>

Proof

Uncollected March 15, 1918 (per detailed list)	\$ 620.32	
Collections Jan. 1 to March 15, 1918.....	154.90	
Undetected error .....	.10	
	<u>\$ 775.32</u>	

SEWER ASSESSMENTS

Uncollected Jan. 1, 1917 (per Auditor's ledger)	\$ 9,025.11	
Committed Jan. 1 to Dec. 31, 1917.....	9,736.52	
	<u>\$ 18,761.63</u>	

Collections Jan. 1 to Dec. 31, 1917.....	\$ 9,051.94	
Rescinded Jan. 1 to Dec. 31, 1917.....	1,609.00	
		<hr/>
		\$ 10,660.94
Uncollected Dec. 31, 1917 (per Auditor's ledger)		<hr/>
		\$ 8,100.69

Proof

Uncollected April 6, 1918 (per detailed list)...	\$ 7,273.93	
Collections Jan. 1 to April 6, 1918.....	826.76	
		<hr/>
		\$ 8,100.69

SIDEWALK ASSESSMENTS

Uncollected Jan. 1, 1918 (per Auditor's ledger)		\$ 4,196.17
Committed Jan. 1 to Dec. 31, 1917.....		6,908.24
		<hr/>
		\$ 11,104.41
Collections Jan. 1 to Dec. 31, 1917.....	\$ 6,731.15	
No abatements		6,731.15
		<hr/>
Uncollected Dec. 31, 1917 (per Auditor's ledger)		\$ 4,373.26

Proof

Uncollected April 6, 1918 (per detailed list)...	\$ 3,453.16	
Collections Jan. 1 to April 6, 1918.....	2,218.74	
		<hr/>
		\$ 5,671.90
Less Commitments Jan. 1 to April 6, 1918...	1,298.64	
		<hr/>
		\$ 4,373.26

Assessors' Department:—The clerical records of this office were examined and found to be in good condition. The tax commitment books were verified. Abatements were compared with the City Auditor's books and found to have been correctly debited to the Overlay accounts. No attempt was made to verify valuations, as this is not part of the Auditor's duty.

License Commissioners' Department:—The financial records of this office were examined and verified. A large percentage of the licenses issued by the City of Lowell are issued from this office, and fees for all licenses excepting liquor are collected here, and later deposited with the City Treasurer.

Fees collected should be deposited with the Treasurer promptly, at the end of each month.

The following tables show a summary of the licenses issued during the year and the amount of fees collected therefor:

Liquor Licenses

63 First Class Common Victuallers.....	@	\$1,300.00	\$ 81,900.00
32 Fourth Class Common Victuallers....	@	1,300.00	41,600.00
1 Brewery		2,000.00	2,000.00
11 Innholders	@	1,800.00	19,800.00
7 Clubs	@	300.00	2,100.00
2 Drugs and Chemicals.....	@	1.00	2.00
43 Druggists	@	1.00	43.00
			<hr/>
			\$147,445.00

Other Licenses

Amusement	27	\$ 979.00
Auctioneers	31	62.00
Common Victuallers	154	770.00
Express and Job Wagons.....	161	161.00
Hackney Coaches	5	53.00
Hawkers and Peddlers No. 1.....	32	800.00
Hawkers and Peddlers No. 2.....	18	18.00
Innholders	11	55.00
Junk Collectors	95	190.00
Junk Collectors' Badges.....	18	9.00
Junk Dealers	12	120.00
July 4th Permits.....	127	145.00
Pawn Brokers	4	200.00
Intelligence Officers	14	28.00
Pool, Billiards, Bowling.....	88	714.00
Recording Liquor Licenses.....	167	167.00
Second Hand Articles.....	20	40.00
Sunday Sale of Ice Cream.....	348	1,740.00
Fish Carts	4	40.00
Itinerant Musicians	19	28.00
Dealers in Old Bottles.....	4	160.00
Coffee Houses	32	160.00
Hurdy Gurdies	1	1.00
Dealers in Old Gold.....	7	14.00
Store Show	1	4.00
Motor Bus	8	80.00
Motor Bus Seals.....	8	4.00
Pictures	1	1.00
Chauffeur's Special	5	5.00
Street Permits	2	2.00
Shooting Gallery	1	5.00
		<hr/>
		\$6,603.00

City Clerk's Department:—The financial records of the City Clerk's office were examined, listed and verified by a comparison with the books of the City Auditor and Treasurer.

The following table shows a summary of the receipts of the department during the year, and the source of same:

Permits:	
Marriage	\$1,394.00
	<hr/> \$1,394.00
Licenses:	
Gasoline	\$ 221.00
Lunch Wagon	100.00
Gunpowder	1.50
Fire Arms	32.50
Sausage	2.00
	<hr/> 357.00
Services rendered:	
Recording Mortgages	\$ 311.02
Assignment of Wages.....	13.75
Married Women's Certificate...	4.25
Miscellaneous	599.51
	<hr/> 928.53
Total receipts	<hr/> \$2,679.53

Engineering Department:—The records of the department pertaining to special assessments were examined and verified by comparison with the books and records in the offices of the City Auditor and Treasurer.

These accounts are proved in the Collector's Department, and are reported under that heading.

Building Department:—The financial records of this department were examined and verified, and found to be in excellent condition.

The following tables show a record of the bills sent out for collection, and also a summary of the amount of cash collected by the department and subsequently deposited with the City Treasurer.

Uncollected Jan. 1, 1917 (per Auditor's ledger)...	\$ 111.44
Committed Jan. 1 to Dec. 31, 1917.....	4,287.12
	<hr/> \$4,398.56
Collections Jan. 1 to Dec. 31, 1917.....	\$4,291.72
Abatements Jan. 1 to Dec. 31, 1917.....	15.84
	<hr/> \$4,307.56
Uncollected Dec. 31, 1917 (per detailed list).....	\$ 91.00

Cash Receipts

Elevator Operator's Licenses.....	\$ 39.00
Receipts from Public Comfort Station.....	336.54
	<hr/>
Total cash receipts.....	\$ 375.54

Police Department:—The financial records of this office were checked and verified, as per the following table:

Uncollected bills Jan. 1, 1917.....	\$ 6.25
Committed Jan. 1 to Dec. 31, 1917.....	566.93
	<hr/>
	\$573.18
Collections Jan. 1 to Dec. 31, 1917.....	568.10
	<hr/>
Uncollected Dec. 31, 1917 (per detailed list)...	\$ 5.08
Cash receipts collected by the department, and subsequently deposited with Treasurer	\$3.80

Fire Department:—The records of bills sent out for collection were examined and proved, as follows:

Uncollected Jan. 1, 1917.....	\$.45
Committed Jan. 1 to Dec. 31, 1917.....	10.00
	<hr/>
	\$ 10.45
Collections Jan. 1 to Dec. 31, 1917.....	10.00
	<hr/>
Uncollected Dec. 31, 1917 (per detailed list)....	\$.45

Wire Department:—The departmental ledger showed that bills were sent out during the year amounting to \$425.63, and the records of the Treasurer and Auditor showed that the Treasurer had collected \$425.63. There were no outstanding accounts, as bills sent out by this department are paid promptly.

Sealer of Weights and Measures:—The financial records of the Sealer were examined and verified by comparison with the books of the Auditor and Treasurer. The accounts were found to be in good condition. The following tables show a proof of the Accounts Receivable and the amount of cash collected by the Sealer and subsequently deposited with the Treasurer.

Uncollected Jan. 1, 1917.....	\$ 30.33
Committed Jan. 1 to Dec. 31, 1917.....	309.08
	<hr/>
	\$339.41
Collections Jan. 1 to Dec. 31, 1917.....	\$286.79
Uncollected Dec. 31, 1917 (per detailed list)	52.62
	<hr/>
	\$339.41
Cash collected by Sealer, deposited with Treasurer	\$770.18

Health Department:—The financial records kept by this department were examined and verified by comparison with the books of the Auditor and Treasurer. Collections of cash are made by the department for the sale of garbage, and for the issuing of licenses for the privilege of collecting garbage.

All collections are deposited with the Treasurer daily.

The signed acknowledgment of the Treasurer for these receipts totalled as follows:

Licenses issued for collecting garbage.....	\$ 540.00
Garbage sold	4,266.65

Total cash collected.....	\$4,806.65
---------------------------	------------

Uncollected accounts receivable were listed, and the cash collected was verified, as follows:

Uncollected Jan. 1, 1917.....	\$1,819.02
Committed Jan. 1 to Dec. 31, 1917.....	2,010.28

\$3,829.30

Collections Jan. 1 to Dec. 31, 1917.....	\$2,243.11
Abatements Jan. 1 to Dec. 31, 1917.....	181.87
	<hr/>
	2,424.98

Uncollected Dec. 31, 1917 (per detailed list)	\$1,404.32
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Milk Inspector:—The cash book of the Milk Inspector was examined and verified as follows:

Oleo licenses issued.....	24	\$ 12.00
Milk licenses issued.....	61	30.52
Milk registration	574	287.00

Total collections paid Treasurer	\$329.52
----------------------------------	----------

Street Department:—The Accounts Receivable Ledger and Bill books kept by the Street Department were examined and verified by comparison with the records of the City Auditor and City Treasurer, and a proof obtained of the receipts of the department during the years 1916 and 1917.

The outstanding accounts were listed, and the collections covering the two-year period were verified as follows:

Uncollected Jan. 1, 1917 (per Auditor's ledger)...	\$1,096.31
Committed Jan. 1 to Dec. 31, 1917.....	1,268.07

\$2,364.38

Collections Jan. 1 to Dec. 31, 1917.....	\$1,145.87
--	------------

Uncollected Dec. 31, 1917 (per detailed list)	1,218.51
---	----------

\$2,364.38

Street Department—Continued:—The department sent out bills during the year 1917 for granolithic sidewalks, and the receipts and outstanding accounts were verified by a comparison of the records of the City Engineer's office with the books of the City Auditor and City Treasurer, as follows:

September 27, 1917 bills committed.....	\$504.84
May 14, 1917 bills committed.....	164.44
	<hr/>
Total amount of bills sent out.....	\$669.28
Collections June 1 to Dec. 31, 1917.....	426.78
	<hr/>
Uncollected Dec. 31, 1917 (per detailed list).....	\$242.50

The total receipts of the department for the year 1917 were classified as follows:

Sewer Maintenance	\$ 23.18
Sewer Construction	3.80
Sewer Connections	549.74
Street Maintenance	370.50
Street Sprinkling	198.65
Granolithic Sidewalks	426.78
	<hr/>
Total 1917 receipts.....	\$1,572.65

As the natural duties of this department keep it very much in the mind of the general public, it would be a good business proposition for the department to issue a classified monthly account of its expenditures, and publish same in connection with the monthly report of the Finance Department, as is done by most cities of a similar size to Lowell.

This could now be done with very little if any extra labor.

Charity Department—Hospital:—The financial records of the City Hospital were examined and verified by comparison with the books and accounts of the Auditor and Treasurer, and were found to be kept in an accurate manner.

The following tables show a summary of the bills sent out during the year and the collections on account of same, together with the outstanding accounts at the end of the year:

Uncollected Jan. 1, 1917 (per Auditor's ledger)...	\$ 238.56
Committed Jan. 1 to Dec. 31, 1917.....	1,747.44
	<hr/>
	\$1,986.00
Collections, Jan. 1 to Dec. 31, 1917.....	\$1,946.73
Uncollected Dec. 31, 1917 (per detailed list)	39.27
	<hr/>
	\$1,986.00

Charity Department—Outdoor Relief:—The financial records of this department were examined and verified by comparison with the books and accounts of the Auditor and Treasurer. The books and accounts were, as usual, in excellent condition and easily proved.

The following table shows a summary of the commitments made during the year and the collections on account of same, together with the outstanding accounts at the end of the year:

Uncollected Jan. 1, 1917.....	\$ 314.28
Committments Jan. 1 to Dec. 31, 1917.....	10,227.09
	<hr/>
	\$10,541.37
Collections Jan. 1 to Dec. 31, 1917.....	\$5,978.75
Uncollected Dec. 31 (per detailed list) ..	4,562.62
	<hr/>
	\$10,541.37

The total receipts for the year are classified as follows:

From Individuals	\$ 6.00
From Other Cities and Towns.....	297.26
From State of Massachusetts.....	5,435.49
From Mothers' Aid.....	240.00
	<hr/>
	\$5,978.75

School Department—General:—The financial records of the School Department were examined, checked and verified by comparison with the books and accounts of the Auditor and Treasurer.

The outstanding accounts receivable at the end of the year were listed, and a proof obtained of the committments and collections made on account of same during the year.

Uncollected Jan. 1, 1917.....	\$ 2,397.79
Committed Jan. 1 to Dec. 31, 1917.....	12,105.77
	<hr/>
	\$14,503.56
Collections Jan. 1 to Dec. 31, 1917.....	\$9,335.36
Abatements Jan. 1 to Dec. 31, 1917....	227.74
Uncollected Dec. 31, 1917 (per detailed list)	4,940.46
	<hr/>
	\$14,503.56

The total receipts for the year are classified as follows:

For Tuition	\$9,303.85
For Sales of Books and Supplies.....	13.26
For Newsboy's Badges	18.25
	<hr/>
	\$9,335.36

School Department—Vocational:—The ledger and bill books kept by this department were examined, checked and verified by comparison with the books and accounts of the Auditor and Treasurer. These record books were well kept and easily verified.

The following table shows a proof of the collections made during the year, and the outstanding accounts at the end of the year:

Uncollected Jan. 1, 1917 (per Auditor's ledger) ..	\$12,218.47
Committed Jan. 1 to Dec. 31, 1917.....	4,591.28
	<hr/>
Collections Jan. 1 to Dec. 31, 1917....	\$16,364.20
Uncollected Dec. 31 (per detailed list) ..	445.55
	<hr/>
	\$16,809.75

Library Department:—The financial records of the Library were examined and proved to agree with the books and accounts of the Auditor and Treasurer. Payments to Treasurer during the year from fines and sales amounted to \$804.13. This total included the amount due from the department on December 31, 1916, said balance being \$210.79.

There was no balance due the City on December 31, 1917, the entire collections of the department having been deposited with the City Treasurer previous to closing the City's books for the fiscal year.

Park Department:—The accounts of this department were examined and proved. The receipts were from two sources only, as follows:

Rent of ground on North Common.....	\$1,375.00
Special Moth Work.....	73.30

Total payments to Treasurer..... \$1,448.30

Water Department:—The financial records of this department were examined and verified by comparison with the books and accounts of the City Auditor and City Treasurer. The uncollected accounts due the department on December 31, 1917, were listed, and a proof obtained of the Treasurer's receipts of cash during the fiscal year. The books and accounts of this department are well kept and easily verified.

This department depends entirely upon its receipts for the maintenance of the department, and naturally great care is taken to safeguard its only source of revenue, but owing to the increased cost of labor and materials, its reserve is growing smaller each year.

An improved system of accounting for the materials and supplies carried in stock would probably result in the conservation of some of these assets, and be a saving to the department.

The total cash receipts of the department during the year are classified as follows:

Water Rates, Annual.....	\$ 12,216.08
Water Rates, Metered.....	227,414.98
Maintenance	27,065.22
Construction	5,369.53

Total receipts \$272,065.81

Water Department—Continued:—The following table shows the amount of bills sent out during the year, the collections, discounts and abatements on account of same, as proved by listing the uncollected accounts as of December 31, 1917, and effecting a reconciliation with the balance due at the beginning of the year.

Uncollected Jan. 1, 1917 (per Auditor's ledger).....	\$ 3,117.10
Committed Jan. 1 to Dec. 31, 1917.....	298,981.70
Collections Jan. 1 to Dec. 31, 1917.....	\$272,065.81
Discounts Jan. 1 to Dec. 31, 1917.....	25,299.93
Abatements Jan. 1 to Dec. 31, 1917.....	3,279.65
Uncollected Dec. 31 (per detailed list)..<	1,453.41
	<hr/>
	\$302,098.80 \$302,098.80

The custom of giving discounts for cash payments of water rates is an antiquated custom and is rapidly being discontinued in all up-to-date municipalities.

Public Scales:—The departmental cash book was examined and the receipts listed, and compared with the books of the Auditor and Treasurer. The total receipts for the year were as follows:

Weighing	\$27.40
Measuring	6.30
	<hr/>

Total receipts paid to Treasurer..... \$33.70

Cemetery Department:—The financial records of this department were examined and verified by comparison with the books and accounts of the City Auditor and Treasurer. The receipts of the department for sales and care of lots in the cemetery are nearly sufficient to pay all of the maintenance expense of the department, without touching the income on the Perpetual Care Trust Funds, which during the year 1917 alone amounted to \$4,583.07.

The reserve revenue of the department from this source amounts in total to \$18,842.30.

As the total maintenance expenses of the department for the year 1917 amounted to \$14,345.78, it will be seen that the Cemetery Department is in a prosperous financial condition and its revenue constantly increasing.

The total receipts of the Cemetery during the year were as follows:

Sale of Lots and Graves.....	\$ 3,468.50
Care of Lots and Graves.....	5,342.50
Opening Graves	2,697.00
Recording and Miscellaneous.....	248.05
	<hr/>

Total cash receipts..... \$11,756.05

Cemetery Department—Continued:—The accounts receivable and also the cash collections were proved by listing the uncollected accounts and effecting a reconciliation with the books of the City Auditor and Treasurer as follows:

Uncollected Jan. 1, 1917 (per Auditor's ledger)...	\$ 2,910.83
Committed Jan. 1 to Dec. 31, 1917.....	9,373.13
Collections Jan. 1 to Dec. 31, 1917....	\$ 8,587.05
Abatements Jan. 1 to Dec. 31, 1917...	17.50
Uncollected Dec. 31 (per detailed list)	3,679.41
	<hr/>

\$12,283.96 \$12,283.96

Interest and Indebtedness:—Receipts on account of interest were checked, added, and verified and found to total as follows:

Interest on deferred taxes.....	\$26,736.04
Interest on bank deposits.....	10,496.85
Interest on Jonathan Tyler Trust Fund.:	1,001.00

Total receipts for interest..... \$38,233.89

The records of loans authorized and the receipts on account of loans issued during the year were examined and verified. The receipts proved to agree with the authorizations of the Municipal Council, and the total was as follows:

Bonds issued	\$ 780,000.00
Temporary Revenue Loans.....	1,350,000.00
Premiums on Above Loans.....	7,628.76
Accrued Interest on Above Loans....	2,047.19

Total receipts from Indebtedness \$2,139,675.95

Payments on account of Interest and Debt were proven by the Auditor's debt record of amounts falling due during the year, and by an examination of the Treasurer's subsidiary cash book and special bank accounts kept for this purpose, which proved to agree with the Auditor's ledger account of same, and with the actual amount due by the City.

The interest requirements and debt maturing during the year were as follows:

Interest:

On Temporary Loans.....	\$ 20,000.00
On General City Debt.....	121,906.20
On Water Debt.....	59,048.75
	<hr/> \$200,954.95

Indebtedness:

General Maturing Debt.....	\$347,341.30
Water Debt Maturing.....	47,000.00
	<hr/> 394,341.30

Total Interest and Maturing Debt.. \$595,296.25

Interest and Indebtedness—Continued:—The following table shows the Treasurer's account of unpaid debt and interest on January 1st, 1917, together with the interest and debt requirements for the year, also the total payments by the Treasurer and the balance in the bank to the credit of this account on December 31st, 1917, which was proved by an examination of the bank statement of that date:

Unpaid Debt and Interest Jan. 1, 1917 (per Auditor's ledger)	\$ 4,622.50
Interest and Debt requirements (as above).....	595,296.25
Total payments by Treasurer (verified).....	\$586,253.75
Unpaid Debt and Interest Dec. 31, 1917 (per Bank Statement)	13,665.00
	<hr/>
	\$599,918.75
	<hr/>
	\$599,918.75

Sinking Funds:—The City of Lowell has loans outstanding amounting to \$1,800,000.00, for the payment of which sinking funds have been provided.

The total amount of cash and securities in these funds on January 1st, 1918, was \$1,506,685.50.

The securities of the four sinking funds, comprising the total owned by the City, was personally examined and checked to a prepared list, and reconciled to January 1st, 1918.

During the year 1917 an improvement was made in the system of filing the securities belonging to these funds.

The securities of each fund had been carefully separated, and each block of bonds systematically wrapped and labelled.

This system greatly facilitated the work of the annual audit, and undoubtedly is of much assistance to the Sinking Fund Commissioners in administering the funds and caring for the maturing coupons.

All coupons not matured were found to be intact, and the securities checked agreed with the list furnished, and also with the books of the City Treasurer and City Auditor.

The income earned by each fund was figured, and the cash transactions of the funds during the year were examined and proved.

The following tables show the receipts and payments during the year, together with the cash balances at the beginning and end of the year, as verified by bank statements of deposits on hand at those times:

HIGH SCHOOL SINKING FUND

1917

	Cash	Securities	Total
On hand at beginning of year...	\$ 285.33	\$124,500.00	\$124,785.33
On hand at end of year.....	3,846.32	129,000.00	132,846.32

Receipts

Annual Appropriation ..	\$3,000.00
Income on securities....	5,227.50
Interest on deposits....	23.84
Securities matured and sold	500.00
Discount and deposits purchased	10.00

Total receipts	\$8,761.34
Cash on hand Jan. 1, '15	285.33
	<hr/> \$9,046.67

Payments

Securities purchased (par)	\$5,000.00
Premiums	176.50
Accrued interest on securities purchased ...	23.55

Total payments	\$5,200.35
Cash on hand Dec. 31, '15	3,846.32
	<hr/> \$9,046.67

WATER LOAN SINKING FUND
1917

	Cash	Securities	Total
On hand at beginning of year..	\$ 1,960.12	\$809,862.60	\$811,822.72
On hand at end of year.....	31,131.22	829,621.30	860,752.52

Receipts

Annual Appropriation..	\$ 16,000.00
Income and Securities	34,674.08
Interest on deposits..	99.58
Securities matured and sold	48,171.30
Discount on securities	135.70

Total receipts	\$ 99,080.66
Cash Jan. 1, 1917....	1,960.12
	<hr/>
	\$101,040.78

Payments

Securities purchased (par)	\$ 40,930.00
U. S. Liberty Bonds, 60%	27,000.00
Premiums on securities	1,371.54
Accrued interest on securities purchased.	608.02

Total payments	\$ 69,909.56
Cash Dec. 31, 1917...	31,131.22
	<hr/>
	\$101,040.78

NEW SCHOOL HOUSES SINKING FUND
1917

	Cash	Securities	Total
On hand at beginning of year...	\$ 181.29	\$113,000.00	\$113,181.29
On hand at end of year.....	5,452.42	116,000.00	121,452.42

Receipts**Payments**

Annual Appropriation..	\$ 4,000.00	Securities purchased	
Income on securities..	4,520.00	(par)	\$ 5,000.00
Interest on deposits...	21.58	Premiums	203.10
Securities matured and		Accrued interest	67.35
sold	2,000.00		
Total receipts	\$10,541.58	Total payments	\$ 5,270.45
Cash on hand Jan. 1, '17	181.29	Cash on hand Dec. 31, '17	5,452.42
	<u>\$10,722.87</u>		<u>\$10,722.87</u>

CITY HALL AND MEMORIAL BUILDING SINKING FUND
1917

	Cash	Securities	Total
On hand at beginning of year...	\$1,749.25	\$367,100.00	\$368,849.25
On hand at end of year.....	9,734.24	381,900.00	391,634.24
Receipts		Payments	
Annual Appropriation..\$ 7,500.00		Securities purchased	
Income on securities... 15,598.00		(par)	\$15,000.00
Interest on deposits... 75.61		Premiums	336.45
Securities matured 200.00		Accrued interest (on	
Discount on securities		securities purchased).	92.97
purchased 40.80			
Total receipts .....\$23,414.41		Total payments .....\$15,429.42	
Cash on hand Jan. 1, '17 1,749.25		Cash on hand Dec. 31, '17 9,734.24	
	\$25,163.66		\$25,163.66

TRUST FUNDS

The securities belonging to the several trust funds held by the City of Lowell were personally examined and listed, and the cash transactions during the year were checked and proved.

There are three funds for which the City has no securities.

The 1913 statutes, Chapter 634, "that all trust funds which have been expended for the general expenses of a city or town shall be restored during the year 1914," in my opinion apply to these funds, and acting under this conviction I wrote a letter to the Finance Commissioner, a copy of which follows:

Lowell, Massachusetts, May 3, 1918.

Hon. James E. Donnelly,
Commissioner of Finance,
City of Lowell, Mass.

Dear Sir:—

In 1914 the City of Lowell had four different trust or investment funds which had been expended for the general expenses of the City, as follows:

Jonathan Tyler, Worthy Poor Fund.....	\$10,000.00
Thomas Nesmith, Worthy Poor Fund.....	25,000.00
Tomas Nesmith, High Street Church Fund.....	1,000.00
Carney High School Medal Fund.....	200.00
	<hr/>
	\$36,200.00

In my opinion these funds should have been restored during the year 1914 in compliance with the Statutes, Chapter 634, Acts of 1913, which is herewith quoted:

(* * * * *)

The City did ntake cognizance of the Act and during the year 1914 tried to negotiate a loan for the amount of these four funds, but the attorneys for the First National Bank of Boston rendered an opinion that both of the Nesmith Funds were perpetual loans and did not constitute a trust fund for the restoration of which money could be borrowed under the statutes.

They also gave an opinion that the cash for the restoration of the Carney eMdal Fund should be raised by taxation.

The net result of these efforts to comply with section 634, Acts of 1913 of the statutes was that ten thousand dollars (\$10,000.00) was borrowed, and one fund, the Jonathan Tyler Worthy Poor Fund, was restored.

By so doing the City effected a saving of two hundred dollars (\$200.00) annually in its current expenses.

During the year 1915, while making the annual audit, I found that three of these funds had not been restored, and immediately called the attention of Finance Commissioner Wm. W. Duncan, by letter, to this fact.

I understand that he endeavored to obtain a legal opinion from the City Solicitor as to the status of the funds in their relation to

Chapter 634, Acts of 1913, but I am unable to discover that such an opinion was ever rendered.

Nothing further has ever been done by the City about these funds, and their condition is the same now as in 1915.

I feel in duty bound to bring this matter to your attention. Either these three funds are trust funds, and as such they should be restored by the City, or they are perpetual loans.

Do you consider that it is constitutionally legal for any body of men who may constitute the City government for a particular year to bind the City to pay a specified rate of interest on a loan forever?

Respectfully,

EVERETT E. TARBOX.

It would be for the best interests of the City if this matter could be legally settled within a reasonable time.

The following tables show the standing and value of the Trust Funds for which the City has cash and securities, as examined and proved:

JOHN DAVIS LIBRARY FUND

	Cash	Securities	Total
On hand at beginning of year....	\$ 2.52	\$102,561.63	\$102,564.15
On hand at end of year.....	486.02	100,544.15	101,030.17

Receipts

Securities matured or sold	\$2,000.00
Accrued interest on securities sold	33.50
Mortgage principal	25.00
Income on securities....	3,248.00
Interest on deposits....	8.44

Total receipts	\$5,314.94
Cash Jan. 1, 1917.....	2.52
	<hr/>
	\$5,317.46

Payments

To Library Trustees....	\$4,461.44
Discount on securities sold	370.00

Total payments	\$4,831.44
Cash Dec. 31, 1917.....	486.02
	<hr/>
	\$5,317.46

The securities belonging to this fund on December 31, 1917, were as follows:

Registered Bonds	\$ 84,000.00
Railroad Stocks	8,200.00
Industrial Stocks	2,100.00
Bank Stocks	3,500.00
Mortgage Notes	2,550.00
Central Savings Bank, Book No. 35073.....	194.15
Cash in Appleton National Bank.....	486.02

Total cash and securities..... \$101,030.17

HAPGOOD WRIGHT CENTENNIAL FUND

On hand Jan. 1, 1917.....	\$5,233.77
Income arned during year.....	210.13
	<hr/>
On hand Dec. 31, 1917.....	\$5,443.90
Securities examined as follows:	
Lowell Inst. for Savings, Book No. 54679.....	\$1,091.87
City Inst. for Savings, Book No. 39419.....	4,352.03
	<hr/>
	\$5,443.90

JONATHAN TYLER WORTHY POOR FUND

This fund has been withdrawn from the Lowell Trust Co. Savings Department, and is now deposited with the Washington Inst. for Savings, Book Na. 23549.

Amount on deposit Jan. 1, 1918..... \$10,000.00

CEMETERY PERPETUAL CARE FUNDS

On hand Jan. 1, 1917.....	\$98,550.00	\$14,259.23	\$112,809.23
Receipts during year.....	7,215.00	4,583.07	11,798.07
	<hr/>	<hr/>	<hr/>
On hand Dec. 31, 1917.....	\$105,765.00	\$18,842.30	\$124,607.30

Securities examined were as follows:

Lowell Five Cent Savings Bank, Book 47514.....	\$ 17,143.26
Central Savings Bank, Book No. 26100.....	16,813.94
Merrimac River Savings Bank, Book No. 8765.....	17,901.62
Mechanics Savings Bank, Book No. 24823.....	16,421.24
City Inst. for Savings, Book No. 74283.....	15,569.34
Lowell Inst. for Savings, Book No. 79266.....	16,542.94
Washington Savings Inst., Book No. 1216.....	16,218.87
Middlesex Safe Deposit & Trust Co., Book No. 1755.....	7,996.09

Total Dec. 31, 1917..... \$124,607.30

Conclusion:—The audit of the 1917 accounts has been most satisfactory from a clerical point of view, and the appended balance sheet reveals the fact that the financial condition of the City on January 1, 1918, was good.

The City on that date had a revenue surplus amounting to \$74,782.94, as disclosed by the audit.

The assets, consisting of Accounts Receivable, are almost without exception good live assets, and collectable, the overlays accounts quite evidently being sufficient to provide for the abatement of all of the uncollectable accounts.

I find the clerks in the various departments quite willing to accept my advice and co-operate with me in the effort to keep the finan-

cial records of the City in an efficient manner and in such a systematic condition that they will reveal the true financial condition of the City at all times and for the benefit of all who may be interested.

I wish to express my appreciation for the courteous treatment received during the course of the audit from the City Officials and Clerks with whom I came in contact.

Respectfully submitted,

EVERETT E. TARBOX.

CITY OF LOWELL

Balance Sheet, January 1, 1918

AUDITOR'S REPORT.

201

REVENUE		Liability Accounts	
Asset Accounts			
Cash:		Temporary Loans:	
In Banks and Office.....	\$ 57,139.57	Anticipation of Taxes.....	\$750,000.00
Accounts Receivable:		Premiums (reserved for payment	
Taxes 1911.....	434.00	of Debt)	7,628.76
" 1914.....	285.60	Appropriation Balances:	
" 1915.....	14,412.96	(Reserved for special services)	
" 1916.....	210,654.08	Fire	1,633.14
" 1917.....	539,895.01	Fire, Triple Combination.....	6,000.00
		Soldiers' Benefit-German War	10,982.62
Street Sprinkling 1914.....	\$765,681.65	Parks	272.00
" 1915.....	18.56	Library:	
" 1916.....	15.87	Restoring Portraits	6.83
" 1917.....	3,641.23	Reconstructing	452.19
	7,226.69	Water	1,941.75
		Cemetery	2,319.24
Moth Assessments 1914.....	\$ 15	Claims	251.84
" 1915.....	1.25	Revising Ordinances	495.50
" 1916.....	457.27		
" 1917.....	775.32		
			24,355.11
	\$ 1,233.99		
Sewer Assessments	8,100.69		
Sidewalk Assessments	4,373.26		
Tax Titles	2,778.89		

REVENUE—Continued

Asset Accounts		Liability Accounts	
Departmental Bills:		Overlays (reserved for Abatement of Taxes):	
Protection of Persons and Property:		1915	4,052.31
Police	5.08	1916	17,344.69
Fire .....	.45	1917	42,406.19
Sealer	52.62		<hr/>
Health Department	1,404.32		63,803.19
Highway Department	1,215.81	Less overabatement 1914.....	3,428.95
Charity Department:			<hr/>
Out Door Relief.....	4,562.62	Revenue (reserved when collected):	
Hospital	39.27	Water	1,453.41
Soldiers' Benefits, from State:		Cemetery	3,679.41
State Aid	11,656.00		<hr/>
Military Aid	975.00	Surplus Revenue, 1917 and prior	
Soldiers' Burials	589.75		5,132.82
German War	40,952.72		74,782.94
Schools:			
General	4,940.46		
Vocational	445.55		
Public Buildings	91.00		
	<hr/>		
Water Department	66,930.65		
Cemetery Department	1,453.41		
	3,679.41		
	<hr/>		
	\$922,273.87		\$922,273.87

NON-REVENUE

General

Asset Accounts

Cash:
In Banks and Office.....

\$332,653.00

Liability Accounts

Appropriation Balances (Loans):

Health and Sanitation:

Sewer Construction

6,531.74

Isolation Hospital

72,587.42

Furniture and Equipment

for Isolation Hospital....

24,000.00

103,119.16

Highways:

Paving

6,676.93

Macadamizing

928.53

New Sidewalks

325.49

Wedge and Porter Streets..

.10

Lawrence Street

1,444.44

Pawtucket Falls Bridge....

2,501.80

School Street Mammoth Rd.

3,062.74

Sale of Dummer St. B'ldgs

152.30

15,092.33

Education:

High School

76,927.83

School Construction

105,365.38

School House Repairs.....

179.68

182,472.89

NON-REVENUE—Continued

Recreation and Unclassified:		
Chambers St. Playground...	892.45	
Land for Public Parks...	1,252.12	
Park Purposes	2,371.74	
Fairgrounds	19,878.84	
Purchase of Land	4,870.51	
Municipal Purposes	394.16	
		29,659.82
Public Service Enterprises:		
Water Purification		2,308.80
		<u>\$332,653.00</u>

 \$332,653.00

Balance Sheet, January 1, 1918—Continued

Indebtedness

Asset Accounts

Sinking Funds:

Cash and Securities:

Water Loan Fund.....	860,752.52
City Hall Loan Fund.....	391,634.24
High School Loan Fund...	132,846.32
School Houses Loan Fund.	132,846.32
	<u>1,506,685.50</u>

Net Bonded Debt (Balancing Account)

3,237,810.80

Funded Debt (with sinking funds):

Water Loan	1,000,000.00
City Hall Loan.....	450,000.00
High School Loan.....	150,000.00
School House Loan.....	200,000.00
	<u>1,800,000.00</u>

Serial Bonds:

3½% Loans	24,000.00
4% Loans	2,158,656.30
4¼% Loans	103,600.00
4½% Loans	582,040.00
5% Loans	50,000.00
	<u>2,918,296.30</u>

Trust Funds Used.....

26,200.00

\$4,744,496.30

\$4,744,496.30

NON-REVENUE—Continued

TRUST

Trust Funds:		
Cash and Securities.....	\$254,736.37	Jonathan Tyler, Worthy Poor 10,000.00
		John Davis, Library..... 101,030.17
		Hapgood Wright, Centennial. 5,443.90
		Cemetery, Perpetual Care.... 124,607.30
		Unpaid Debt and Interest.... 13,655.00
		Carney Medal 200.00
	26,200.00	Thomas Nesmith, Worthy Poor 25,000.00
Used by City.....		Thomas Nesmith, High Street
		Church 1,000.00
	<u>\$280,936.37</u>	<u>\$280,936.37</u>

I N D E X.

Accountant's Report	160
Assets and Liabilities.....	6
Auditor's Report by Departments.....	51-124
Auditor's Balance Sheet.....	9
Auditor's Debt Statement.....	10-11-12
Cemeteries—Trust Funds	137-138
Commissioners of Sinking Funds.....	139
Expenditures—Dummer Street	167-168
" New High School.....	168
" Pawtucket Bridge	169
" Other Bridges	169
Financial Statement Receipts.....	8
Insurance	167
Indebtedness	12
Land Owned by the City for Burial Purposes.....	164
Loans	12-166
Payments—Revenue and Non-Revenue.....	14
Property Owned by City—Valuation.....	151-164
Receipts and Payments—Classified.....	7-50
Sinking Funds'	139-140-141-142-143-144-145-146-147-148
Tax Rates	150-166
Trust Funds	136-148-149

By Accounts

Auditor	57
Auditing City Books.....	114
Assessors	58
Band Concerts	95
Board of Trade Agricultural Exhibition.....	97
Cemeteries	106
Charity Department	84-85
" " Dependent Mothers	85
Charity Specials	77
City Clerk	59
City Debt	108
City Hall	62
City Hall Safes.....	69
Claims	114
Comfort Station	76
Commissioners	56
Elections and Registration.....	61
Engineering	60
Fire	65
Fire Specials	70-71
Fish Warden	69

Health	74
Inspection of Buildings.....	67
" " Wires	66
" " Milk and Vinegar.....	76
" " Animals	75
Insurance	62
Interest	108
Isolation Hospital	77-118-167
July 4th	95
Labor Day	95
Law	59
Library	100-101
License Commission	58
Lighting Streets	81
Liquor Licenses	110
Mayor	56
Memorial Day	96
Messenger	60
Moths	68
Municipal Purposes	134
Parks	94-128-129
Play Grounds	97
Police	64
Police Specials	70
Pound Keeper	69
Revision of Ordinance.....	114
Rifle Range	66
Schools	75-90-91-124-125
Sealer	68
Sewer Construction	118
Sewer Maintenance	77
Sinking Funds	108
Smoke	75
Soldiers' and Sailors' Celebration.....	97
State Aid	88
Streets	80-81-120-121-122
Street Watering	81
Supply	61
Taxes—Corporation	111
" County	110
" Grade Crossings	110
" Highways	111
" National Bank	110
" Soldiers' Exemption	111
" State	110
Textile School	91
Treasurer	57
Waterways	70
Water Works	104-132
Weigher	69
Workmen's Compensation Act.....	115

Sixth Annual Report

OF THE

COMMISSIONER OF

WATER WORKS

OF THE

CITY OF LOWELL, MASS.



To the Municipal Council, for the year ending
Dec. 31, 1917, and being the Forty-fifth
Annual Report of the Water
Works Department

1917

F. A. M. TOBIN'S PRINTERY

1918

The annual report of the operation of the Water
Works Department of the City of Lowell for 1917, by the

Superintendent, ROBERT J. THOMAS,

Engineer, STEPHEN KEARNEY,

Registrar, J. W. CRAWFORD,

to Hon. George H. Brown, Commissioner Water Works
and Fire Protection, Lowell, Mass.

FINANCIAL STATEMENT, LOWELL WATER WORKS, 1917.

TABLE I	CHARGES			RECEIPTS BY ACCOUNTS				
	WATER		Total	Total Charges	Cash Receipts	Discounts	Abate-ments	Due
	Rate	Metered						
Transfer .....	.....	.....	.....	\$ 3,117.10	\$ 1,267.14	\$ 2.30	\$1,438.06	\$ 409.60
January	\$ 43.50	\$ 50,517.71	\$ 50,561.21	\$ 4,167.65	49,743.20	4,605.65	249.70	130.31
April	20.00	57,365.22	57,385.22	2,241.60	53,392.63	5,692.03	469.20	72.96
May	13,353.92	.....	13,353.92	.....	12,008.10	1,220.88	61.94	63.00
July	73.78	90,600.24	90,674.02	11,334.41	92,812.91	8,586.18	417.52	191.82
October	71.13	54,747.77	54,818.90	14,444.77	62,841.83	5,192.89	643.23	585.72
Int'st & Tr'sfers .....	.....	.....	.....	.....	28,699.71	.....	.....	.....
	\$13,562.33	\$253,230.94	\$266,793.27	\$32,188.43	\$300,765.52	\$25,299.93	\$3,279.65	\$2,453.41

FINANCIAL STATEMENT, LOWELL WATER WORKS, 1917.—OUTGO.

TABLE II	Pay Roll and Salaries	W. W. Supplies	Interest and Principal	Refund and Vacancies	General Expense	Stable	Coal	Engineer- ing	Total 1917
January	\$ 8,509.90	\$ 3,905.58	\$ 2,714.37	\$ 3.36	\$ 348.37	\$ 438.76	\$ 1,402.27	.....	\$ 17,718.61
February	8,848.22	1,168.84	.....	.....	117.49	321.61	2,263.68	.....	12,719.84
March	11,367.66	1,112.96	1,200.01	.....	259.99	325.28	3,507.14	.....	17,773.04
April	9,931.62	2,598.79	12,000.00	.....	239.84	568.48	2,882.57	173.87	28,395.17
May	10,754.03	2,787.80	32,100.00	94.79	121.22	1,337.72	4,538.92	.....	51,734.48
June	14,292.61	3,729.49	480.00	.....	733.65	575.52	2,231.12	.....	22,042.39
July	10,887.13	1,946.21	4,260.00	90.22	109.83	2,592.81	2,887.00	60.40	22,833.60
August	11,698.41	1,892.85	16,964.37	26.30	109.97	1,040.54	3,545.31	.....	35,277.75
September	13,892.11	1,727.84	4,950.00	.....	464.60	658.79	2,806.73	14.53	24,514.60
October	12,040.34	2,194.23	4,020.00	54.18	240.24	603.69	2,932.12	12.96	22,097.76
November	12,136.42	268.98	20,880.00	.....	100.00	.....	1,545.09	45.09	34,975.58
December	15,347.57	.....	6,480.00	.....	.....	455.00	.....	20.83	22,303.40
	\$140,102.02	\$23,333.57	\$106,048.75	\$268.85	\$2,845.20	\$8,918.20	\$30,541.95	\$327.68	\$312,386.22

LOWELL WATER WORKS, 1917.

FINANCIAL STATEMENT OF "OTHER THAN WATER CHARGES" FROM TABLE I.

TABLE III	Meters Sold	Meter Repairs	New Services	Changed 'Services	Interest Charges	Labor and Material	Total
January	\$1,076.94	\$ 588.49	\$1,018.32	\$224.42	.....	\$ 1,259.48	\$ 4,167.65
April	539.77	379.20	594.18	91.33	.....	637.12	2,241.60
July	1,317.28	121.50	867.91	289.73	\$ 258.51	8,479.48	11,334.41
October	1,087.85	38.16	611.83	360.09	.....	12,346.84	14,444.77
	\$4,021.84	\$1,127.35	\$3,092.24	\$965.57	\$258.51	\$22,722.92	\$32,188.43

FINANCIAL STATEMENT LOWELL WATER WORKS, 1917.

SUB-DIVISION OF "PAY ROLL AND SALARIES" FROM TABLE II.

TABLE IV	Office and Officials	Central-ville Pumping Station	Boulevard Pumping Station	Cook Pumping Station	General Maintenance	Construction	New Services	Changed Services	Meters and Parts	Filter	Pension	Total
January	\$ 1,162.23	\$ 946.65	\$ 913.65	.....	\$ 3,726.12	\$ 790.30	\$ 478.50	\$ 10.62	\$ 466.48	\$ 411.35	.....	\$ 8,905.90
February ...	1,118.40	926.95	956.20	.....	3,994.17	469.38	271.80	11.13	548.17	552.02	\$ 8.00	8,848.22
March	1,418.52	1,111.25	1,165.75	.....	4,978.58	801.14	390.68	40.63	681.52	771.59	30.00	11,367.66
April	1,151.76	943.70	934.95	.....	4,302.12	715.02	651.21	48.41	512.99	641.46	30.00	9,931.62
May	1,151.76	908.26	961.01	.....	4,726.69	516.86	1,144.33	146.68	540.48	626.96	31.00	10,754.03
June	2,366.38	1,194.75	1,180.56	.....	5,999.23	1,034.75	898.96	137.36	539.37	861.25	30.00	14,292.61
July	1,320.56	953.20	985.95	140.31	4,442.64	1,061.51	438.53	95.82	415.03	853.58	31.00	10,887.13
August	1,320.56	869.20	1,005.17	815.77	4,431.49	1,233.75	591.53	178.09	419.80	752.05	31.00	11,698.41
September ..	1,722.70	1,249.95	1,202.63	217.25	5,553.31	1,748.78	652.61	191.99	608.07	715.58	30.00	13,892.11
October	1,338.24	1,014.95	951.96	.....	6,532.11	310.63	521.91	114.61	550.93	674.00	31.00	12,040.34
November ...	1,355.92	1,123.20	999.23	.....	5,810.05	732.12	492.69	52.46	658.65	881.20	30.00	12,136.42
December ...	1,785.32	1,418.80	1,370.72	502.00	6,413.81	1,249.56	653.79	106.95	773.29	1,042.43	31.00	15,347.57
	\$17,212.35	\$12,660.10	\$12,627.78	\$1,675.33	\$60,911.22	\$10,817.80	\$7,181.54	\$1,134.75	\$6,814.78	\$8,783.37	\$283.00	\$140,102.02

TABLE V.
FINANCIAL STATEMENT,
LOWELL WATER WORKS, 1917.

SUB-DIVISION "WATER WORKS SUPPLIES" FROM TABLE II.

Pumping Station Supplies.....	\$ 3,634.29
C. I. Pipe and Specials.....	2,830.42
Hydrants, Gates and Boxes.....	3,911.69
Small Pipe and Boxes.....	2,628.53
Meters and Parts.....	4,295.01
Machinery and Tools.....	308.33
Miscellaneous	4,648.53
Filter Supplies	1,076.77
	<hr style="width: 10%; margin: 5px auto;"/>
	\$23,333.57

TABLE VI.
FINANCIAL STATEMENT, LOWELL WATER WORKS, 1917.
DETAIL OF "PRINCIPAL AND INTEREST" FROM TABLE II.

FOR	Amount Original Loan	Amount Jan. 1, 1917	Paid 1917	Amount Jan. 1, 1918	Interest Paid 1917	Rate per cent.	Interest Payable
Bonds 1890	\$1,000,000.00	\$1,000,000.00	.....	\$1,000,000.00	\$40,000.00	4	May Nov.
..... 1910							
Allis-Chalmers Pumps 1920	60,000.00	24,000.00	\$ 6,000.00	18,000.00	960.00	4	June Dec.
..... 1911							
P. S.—Reservoir, etc. 1921	100,000.00	50,000.00	10,000.00	40,000.00	2,000.00	4	Feb. Aug.
..... 1912							
P. S.—Reservoir, etc. 1932	75,000.00	60,000.00	3,750.00	56,250.00	2,400.00	4	Mar. Sept.
..... 1913							
P. S.—Reservoir, etc. 1933	75,000.00	63,750.00	3,750.00	60,000.00	2,868.75	4 ½	Feb. Aug.
..... 1914							
Land for Wells. 1944	15,000.00	14,000.00	500.00	13,500.00	560.00	4	Feb. Aug.
..... 1915							
Purification Plant 1935	225,000.00	213,000.00	12,000.00	201,000.00	8,280.00	4	Apr. Oct.
..... 1916							
Extension of Mains, etc. 1921	55,000.00	55,000.00	11,000.00	44,000.00	1,980.00	4	May Nov.
		\$1,479,750.00	\$47,000.00	\$1,432,750.00	\$59,048.75		

TABLE VII.
FINANCIAL STATEMENT,
LOWELL WATER WORKS, 1917.

MAINTENANCE.

Labor:

Office and Officials.....	\$ 17,212.35
Pumping Stations	26,963.21
Engineering	327.68
Pension	283.00
Filter	8,783.37
General Maintenance	68,860.75

Stock:

Water Works Supplies.....	12,057.38
Pumping Station Supplies.....	3,634.29
Stable	8,918.20
Coal	30,541.95
Interest	59,048.75

\$236,630.93

CONSTRUCTION.

Labor	\$ 17,999.34
Stock	10,487.10
Payments on Loans.....	47,000.00

\$ 75,486.44

TABLE VIII.
FINANCIAL STATEMENT,
LOWELL WATER WORKS, 1917.

LOAN FOR PURIFICATION PLANT AND DEPARTMENT
EQUIPMENT.

Balance from 1916.....	\$3,561.02
Transferred to Water Works Account for labor, etc.....	1,252.22
	<hr/>
Balance to Jan. 1, 1918.....	\$2,308.80

TABLE IX.
LOAN FOR PURCHASE LAND FOR PURIFICATION PLANT.

Balance from 1916.....	\$10,551.23
Paid for Land, etc.....	5,680.72
	<hr/>
Balance to Jan. 1918.....	\$ 4,870.51

FINANCIAL STATEMENT, LOWELL WATER WORKS, 1917.

CONSOLIDATED STATEMENT.

RECEIPTS.

Bal. Jan. 1, 1917, W. W. Account.....	\$13,562.45
Bal. Jan. 1, 1917, Purification Plant Loan	3,561.02
Bal. Jan. 1, 1917, Purchase Land....	10,551.23
	<u>27,674.70</u>

Received:

From Metered Water Rates.....	222,671.80
From Fixture Rates.....	11,715.01
	<u>234,386.81</u>
Total from Consumers.....	
From Municipal Depts. for Water.	7,733.27
From Interest and Transfers.....	25,899.71
From Tax Levy for Sinking Fund.	16,000.00
From Labor and Material Charges	32,745.73
	<u>82,378.71</u>
	<u>\$344,440.22</u>

EXPENDITURES.

For Operation and Repairs.....	\$177,582.18
Interest	59,048.75
	<u>\$236,630.93</u>
Payments on Loans.....	47,000.00
Payments to Sinking Fund....	16,000.00
Payments for W. W. Construction	28,486.44
Payments for Purification Plant Construction	1,252.22
Payments for Land.....	5,680.72
	<u>35,419.38</u>
Total Construction	268.85
Unclassified Expenditures	
Balance W. W. Receipts.....	1,941.75
For Purification Plant.....	2,308.80
For Purchase Land.....	4,870.51
	<u>9,121.06</u>
Total Balance	<u>\$344,440.22</u>

Cost of Works to date.....	\$3,869,443.35
Debt to date.....	1,432,750.00
Sinking Fund to date.....	860,752.52

Superintendent's Report

LOWELL, MASS., January 1, 1918.

To the Honorable George H. Brown,

*Commissioner of Water Works and Fire Protection
of the City of Lowell, Massachusetts.*

DEAR SIR:—

With this report are submitted tables showing the number of new services, services changed, new meters set, hydrants added and changed, extension of main pipe and main pipe taken up and replaced, all of which shows less work than was usual in previous years. Notwithstanding this comparative shortening in the amount of construction and reconstruction viewed in connection with the finances of the Department, it was all the revenues could stand.

If the Department receipts would warrant it, many more improvements could have been made, in fact, several times the amount of money expended could have been used for upkeep, not to speak of new work urgently needed. Naturally the increase in the cost of labor and material has made matters worse, but the basic trouble is due to the fact that the water rates are too low, and until they are increased the necessary maintenance, renewal and construction work of the Department is bound to suffer, and the condition of the property, as a Water Works Plant, to deteriorate so that poor service to the public will inevitably follow.

At present the special weakness of the system is the limited quantity of water obtainable from the Boulevard Wells.

CONSUMPTION.

An increase of 133,000,000 gallons in the annual consumption of water in 1917 following an increase of 240,000,000 gallons in 1916, and the inability of the Boulevard system of wells to respond to this extra demand, is the special cause of the crippling of the Department water supply. For two years the increase amounts to more than 1,000,000 gallons daily, and is accounted for by the enlargement of the industries of the City and the consequent addition to its population.

To meet this growth of the City's population, an increase in the supply is imperative both from a domestic and fire protection standpoint. One or two hundred additional wells should be driven on land (purchased during the year) lying northwesterly from the Pumping Station. Many of the old wells should also be overhauled, thereby increasing the yield of water from them.

Too much attention cannot be given to keeping the wells in good condition and developing this Boulevard well field to its greatest capacity. By so doing the advantages offered by the Filtering Plant can be made available, guaranteeing to the public a clean, safe and wholesome water, which is the greatest service that can be rendered them.

As can be seen by the City Engineer's Report, the Cook and Hydraulic Wells had to be started in order to supply sufficient water. That could have been avoided had the Boulevard Well Plant been kept up to its highest capacity.

The operation of the Cook Wells Pumping Station is very costly, and the quality of the Cook and Hydraulic water untreated and unfiltered, and discharged directly into the distribution mains, is very unsatisfactory for domestic uses of all kinds. The expense of pumping at the Cook Plant, \$125.00 per day, would more than offset

the interest on the investment required to place the Boulevard Plant in condition and obviate the necessity of the use of the Cook Wells as they are now operated.

In my previous reports I recommended that new pumps and new Pumping Station should be erected to handle this water at the Cook Wells plant. A new up-to-date pump would effect a material saving in the cost of pumping. A new station could be more advantageously located as regards draught from both systems of wells. Also, the water should be treated so as to at least remove the danger from lead poisoning caused by excess of carbonic acid in these waters.

Another improvement which is almost an absolute need is the installation of an eight or ten million gallon pump at the West Sixth Street Pumping Station. If a pumping engine similar to the Allis-Chalmers now doing duty there was too costly, probably a turbine or motor-driven centrifugal pump, which could be purchased and installed at considerable less cost, might answer the purpose.

With a new pump at this station, and Boulevard Well Plant enlarged to yield nine or ten million gallons, the main supply of the City would then be assured, and the improvement of the Cook and Hydraulic could be entered upon later.

The distribution system of the Works is in fairly good condition. A few dead ends remain to be connected, about 100 new stop valves added, and the balance of the 16in. pipe to the Oaklands is yet to be laid.

If the revenues of the Department warranted, an inspection and test of the gate valves should be made and the old flush hydrants replaced by post hydrants. A number of valve boxes need renewing and the valves require packing.

Respectfully submitted,

ROBERT J. THOMAS,

Superintendent.

NEW SERVICES, 1917.

No.	Kind	Feet
12	¾ in. Galvanized Iron.....	356.2
132	¾ in. Galvanized Iron.....	4,869.11
22	1 in. Galvanized Iron.....	1,006.5
2	1½ in. Galvanized Iron.....	38.2
5	2 in. Galvanized Iron.....	189.6
4	6 in. Cast Iron.....	547.9
1	8 in. Cast Iron.....	13.10
<hr/>		<hr/>
178		7,021.9

Total	previously laid.....	547,714 feet
“	now laid	554,735 “
Total	number services laid.....	14,865
“	“ cut off at main.....	1,083
“	“ reconnected	91
“	“ now in use.....	13,873

SERVICES CHANGED, 1917.

No.	Kind	Changed To						Total Ft. In.
		Lead Lined ¾ in.	Lead Lined 1 in.	Iron ¾ in.	Iron 1 in.	Iron 1½ in.	Iron 2 in.	
3	⅝ in. Lead .			143- 6				143-6
1	⅝ in. Lead .				17-6			17-6
3	¾ in. Lead .	87-6						87-6
12	¾ in. Lead .			226- 8				226-8
4	¾ in. Lead .				41-6			41-6
7	1 in. Lead .				200-8			200-8
1	1 in. Lead .						40-6	40-6
6	¾ in. L. L...			77- 3				77-3
1	¾ in. L. L...				66-6			66-6
1	1 in. L. L...				44			44-0
3	¾ in. Iron ..	66						66-0
20	¾ in. Iron ..			361- 2				361-2
8	¾ in. Iron ..				272			272-0
1	¾ in. Iron ..					72		72-0
4	1 in. Iron ..			88				88-0
15	1 in. Iron ..				331-5			331-5
1	1 in. Iron ..					40-6		40-6
1	1 in. Iron ..						81-4	81-4
2	1½ in. Iron ..					58-6		58-6
2	1½ in. Iron ..						146-6	146-6
1	2 in. Iron ..					58-9		58-9
4	2 in. Iron ..						113-8	113-8
40	¾ in. Tin ...			923- 2				923-2
4	¾ in. Tin ...				79-6			79-6
1	1 in. Tin ...		36-6					36-6
1	1 in. Tin ...			45- 2				45-2
6	1 in. Tin ...				96-6			96-6
153		153-6	36-6	1,864-11	1,149-7	229-9	382	3,816-3

METERS.

Meters running January 1, 1917.....	11,656
New Meters set 1917.....	237
Meters discontinued	2
Meters condemned and not replaced.....	2
Total increase for year.....	233

Meters running January 1, 1918..... 11,889

Meters condemned and replaced.....	12
Meters condemned 1916, replaced 1917.....	7
Private meters sold.....	23
Private meters condemned and replaced.....	1
Private meters changed.....	1
Meters changed	21
stopped	971
frozen and repaired.....	225
stored at shop.....	83
leaking	51
out for test.....	35
damaged by hot water.....	2
discontinued	2
Temporary meters set.....	10
Private meters repaired.....	7

METERS RUNNING JANUARY 1, 1918.

Sizes	$\frac{1}{8}$ in.	$\frac{3}{4}$ in.	1 in.	1 $\frac{1}{2}$ in.	2 in.	3 in.	4 in.	6 in.	8 in.	Total
Columbia	76	1								77
Crown	3212	1653	337	26	46	7	7	5		5,293
Desper	14	4	3							21
Duplex	1		1							2
Empire	270	45	10	6	7	3				341
Empire Compound							1			1
Gem					6	1	4			11
Gem Empire							2			2
Hersey	2047	268	57	22	17	1	2	1	2	2,417
Hersey Detector .						1	8	27	4	40
Keystone	63				1					64
King	80	3								83
Lambert	814	90	19		2					925
Nash	568	118	56		2					744
Niagara	1									1
Thomson	6	14	1							21
Torrent						1	2			3
Trident	574	34	1	1						610
Union	28	7		1						36
Watch Dog	193	13	9	3	1		1			220
Worthington	38	1	28	31	28	6	2			134
Worth-Disc.....	753	36	22	11	12	4				843
Total	8743	2287	544	101	122	24	29	33	6	11,889

NEW HYDRANTS, 1917.

Baldwin Street	Corey Hydrant
Barasford Street	Boston Post Hydrant
Bunker Hill Avenue.....	Corey Hydrant
Hoyt Avenue	Smith Hydrant
Island Street	Flush
Lafayette Street (2)	Corey Hydrant
Lupine Road	Corey Hydrant
Princeton Street at Rutland.....	Boston Machine
Varnum Avenue—Lowell General Hospital...	Corey Hydrant
West Meadow Road.....	Corey Hydrant

11 New Hydrants set 1917.

HYDRANTS CHANGED, 1917.

Location	Taken Out	Set
Appleton, cor. Pearl.....	Ludlow.....	Ludlow
Dutton, opp. Kitson.....	Chapman.....	"
Fairmount at No. 85.....	Boston Machine....	Corey
First St. (McKenna's Garage)....	Flush.....	Ludlow
Fred	"	Corey
Gorham and Appleton.....	Ludlow.....	Ludlow
Lakeview Ave., cor. Front.....	Flush.....	Corey
Market, cor. Dummer.....	"	"
Merrimack, cor. Worthen.....	Ludlow.....	Ludlow
Middlesex at No. 160.....	Chapman.....	Corey
Myrtle and Fourth Sts.....	Flush.....	"
Pawtucket Bridge	Boston Machine....	"
Tilden and Moody.....	Flush.....	"
Wamesit	Corey.....	"
Wamesit, near Lawrence.....	Flush.....	"
W. Sixth and Aiken Ave.....	Ludlow.....	"

16 Hydrants changed 1917.

HYDRANTS, JANUARY 1, 1918.

Kind	Flush	2 Noz.	3 Noz.	4 Noz.	Total
Boston Machine ..			168		168
Chapman		3	124	51	178
Coffin			1		1
Corey			55		55
Eddy			32	1	33
Fairbanks			19		19
Flush	232				232
Glanmorgan			1		1
Holyoke			1		1
Kennedy			1		1
Lowrey	7				7
Ludlow		29	607	14	650
Michigan			5		5
O'Brien			1		1
A. P. Smith.....			48		48
Perkins				1	1
Pratt & Cady.....			26		26
Walker			17		17
Totals	7	232	32	67	1,444

LOW SERVICE—WATER PIPE LAID DURING THE YEAR 1917.

		Length of pipe in feet				
		4 in.	6 in.	8 in.	10 in.	16 in.
Baldwin St....	From Middlesex St. northerly.....			646.		
Barasford St...	From Andover St. northerly.....		368.			
Bunker Hill St.	From Lakeview Ave. northerly.....			470.		
Chatham St...	From old end westerly.....		25.5			
Foster St....	From old end near Princeton St. northerly		56.5			
George St....	Fire service into old B. & M. Station		24.			
Hoyt Ave....	From old end easterly.....		40.			
Island St....	From Lakeview Ave. southerly and westerly in dump.....	635.	31.5			
Isolation Hos..	From West Meadow Rd. westerly to Dining Hall		172.			
Lafayette St...	From Riverside St. easterly.....			394.		
Lafayette St...	From Rosemont St. westerly.....			26.		
Lowell G. Hos..	From Varnum Ave. northerly.....	6.	296.			
Lupine Rd....	From old end northerly.....		77.			
Orchard St....	From old end westerly to Woodward Ave.			384.		
Pawtucket St..	Extend Blow off into Pawtucket Canal		24.			
Perry St.....	Fire service into Flemings.....		36.			
Rogers St....	From old end easterly.....				249.	
Rosemont St..	From old end northerly to Lafayette St.			109.		
School and Mammoth Rd	From Pawtucket St. to Varnum Ave.		55.			1059.
Stedman St...	From old end southerly.....			108.		
Upham St....	From old end easterly.....		15.			
W. Meadow Rd.	From old end northerly to Isolation Hospital		4.5		762.	
Wyman St....	From Clitheroe St. easterly.....			158.		
		641.	1225.	2295.	1011.	1059.

LOW SERVICE—WATER PIPE REMOVED DURING THE YEAR 1917.

Street	Location	Length of pipe in feet				
		4 in.	6 in.	8 in.	10 in.	16 in.
Hall St.....	From Tremont St. easterly.....		123.			
School and Mammoth Rd	On Pawtucket St. to Varnum Ave...			634.		
			123.	634.		

LOW SERVICE—LIST OF STOP GATES SET DURING THE YEAR 1917.

Street	Location	4	6	8	10	16
		in.	in.	in.	in.	in.
Baldwin St....	3 ft. north of north line Middlesex St., 26 ft. west of east line Baldwin St. On service to R. R.....			1		
Baldwin St....	9 ft. south of R. R. fence, 11 ft. east of west line Baldwin St. On hydrant.....			1		
Baldwin St....	27 ft. south of R. R. fence, 8 ft. east of west line Baldwin St. On hydrant.....		1			
Barasford St...	On north line Andover St., 12 ft. east of Barasford St.		1			
Bunker Hill St.	On north line Lakeview Ave., 12 ft. west of east line Lakeview Ave.....			1		
George St....	23 ft. north of north line Green St., 5.5 ft. east of west line George St. On fire service.....		1			
*Island-St....	31 ft. north of south line Lakeview Ave., 22 ft. east of west line Island St.....		1			
Isolation Hos..	On service to Hospital, 35 ft. west of east line West Meadow Road		1			
Lafayette St...	On east line Riverside St., 13 ft. south of north line Lafayette St.			1		
Lakeview Ave..	23 ft. west of west line Front St., 8.5 ft. north of south line Lakeview Ave. On hydrant.....		1			
*Lowell G. Hos	33 ft. west of west line Avalon St., 18 ft. south of north line Varnum Ave.....		1			
Lowell G. Hos..	266 ft. north of north line Varnum Ave., 55 ft. west of new building. On hydrant.....		1			
*Mammoth Rd.	8 ft. north of north line Riverside, 15 ft. west of east line Mammoth Road. On hydrant.....		1			
Market St....	On west line Dummer St., 17 ft. north of south line Market. On hydrant		1			
Merrimack St..	23 ft. east of west line Worthen St., 11 ft. south of north line Merrimack. On hydrant.....		1			

LOW SERVICE—LIST OF STOP GATES SET DURING THE YEAR 1917.—Continued.

Street	Location	4 in.	6 in.	8 in.	10 in.	16 in.
Orchard St....	On south line Woodward Ave., 12 ft. west of east line Orchard			1		
Pawtucket St..	20 ft. east of west line School St., 14 ft. north of south line Pawtucket.....			1		
*Perry St.....	84 ft. north of north line Sherman St., 11 ft. east of west line Perry. On fire service.....		1			
Perry St.....	16 ft. west of west line Perry St., 3 ft. south of Flemings Building. On fire service.....		1			
Riverside St..	1 ft. north of north line Mammoth Road, 23 ft. east of west line Riverside.....			1		
Rogers St.....	Front of No. 824, 12 ft. south of north line Rogers..				1	
Rosemont St..	On south line Lafayette St., 13 ft. east of west line Rosemont			1		
School St.....	22 ft. north of north line Pawtucket St., 21 ft. west of east line School.....					1
School St.....	80 ft. south of Northern Canal, 26 ft. west of east line School					1
School St.....	62 ft. south of north line Riverside, 13 ft. west of east line School.....					1
*School St....	219 ft. north of north line Pawtucket St., 39 ft. east of west line School.....	1				
School St.....	49 ft. south of Northern Canal, 19 ft. west of east line School. On Blow off.....		1			
*School St....	91 ft. south of Northern Canal, 25 ft. west of east line School St. On hydrant.....		1			
Varnum Ave...	2 ft. east of west line Mammoth Road, 31 ft. north of south line Varnum Ave.....			1		
Wamesit St....	38 ft. north of north line Lawrence St., 10 ft. west of east line Wamesit St. On hydrant.....		1			
W. Meadow Rd.	On hydrant opp. east end T. B. No. 1 Building, 5 ft. east of hydrant.....		1			
		1	17	9	1	3

* Indicates Smith Gates.

LOW SERVICE—LIST OF STOP GATES REMOVED DURING THE YEAR 1917.

Street	Location	4 in.	6 in.	8 in.	10 in.	16 in.
Hall St.....	On east line Tremont St., 18 ft. north of south line Hall St.		1			
Riverside St...	20½ ft. east of west line Riverside, 11½ ft. south of north line Mammoth Road.....			1		
School St....	238 ft. south of Pawtucket Bridge, 20 ft. west of east line School St.....			1		
Mammoth Rd..	31½ ft. east of west line Mammoth Road, 31 ft. north of Pawtucket Bridge.....			1		
Mammoth Rd..	24 ft. east of west line Riverside, 17 ft. south of north line Mammoth Road.....			1		
Varnum Ave...	22 ft. south of north line Riverside, 21 ft. west of east line Mammoth Road.....			1		
		...	1	5	...	...

LOW SERVICE—LIST OF HYDRANTS SET DURING THE YEAR 1917.

Street	Kind	Location
Baldwin St.....	Corey.....	West side 27 ft. south of R. R. fence.
Barasford St.	Boston Post.	West side at end of line.
Bunker Hill St....	Corey.....	East side at end of line.
Cardinal O'Connell Parkway.....	Ludlow.....	East side at Merrimack St.
Hoyt Ave.	Smith.....	South side at end of line.
Island St.....	Flush.....	In dump at end of line.
Lafayette St.....	Corey.....	North side 355 ft. east of Riverside St.
Lafayette St.....	Corey.....	North side opp. Rosemont St.
Lowell General Hospital.....	Corey.....	266 ft. north of Varnum Ave. 7 ft. west of new service.
Lupine Rd.....	Corey.....	West side at end of line.
Princeton St.....	Boston Mach.	North side 245 ft. east of Webber St.
West Meadow Rd.....	Corey.....	West side at end of line.

LOW SERVICE—LIST OF HYDRANTS REMOVED DURING THE YEAR 1917.

Street	Kind	Location
Merrimack St.....	Ludlow.....	South side cor. Maiden Lane.

HIGH SERVICE—WATER PIPE LAID DURING THE YEAR 1917.

Street	Location	Length of pipe in feet				
		4	6	8	10	16
		in.	in.	in.	in.	in.
Eleventh St....	From old end easterly to Aberdeen St.....	...	157	...	...	...
Fairmount St..	From 1916 end southerly to Haines Ave.....	...	...	...	...	517
Garden Rd....	From old end southerly.....	...	...	89	...	...
		...	157	89	...	517

HIGH SERVICE—WATER PIPE REMOVED DURING THE YEAR 1917.

Street	Location	Length of pipe in feet				
		4	6	8	10	16
		in.	in.	in.	in.	in.
Fairmount St..	From 1916 end southerly to Haines Ave.....	...	517	...	...	...

HIGH SERVICE—LIST OF STOP GATES SET DURING THE YEAR 1917.

Street	Location	4	6	8	10	16
		in.	in.	in.	in.	in.
Fairmount St..	On south line Haines Ave., 15 ft. east of west line Fairmount St. ....	...	...	...	...	1
Fairmount St..	242 ft. north of north line Haines Ave., 9 ft. east of west line Fairmount St. On hydrant.....	...	1	...	...	...

HIGH SERVICE--LIST OF STOP GATES REMOVED DURING THE YEAR 1917.

Street	Location	4	6	8	10	16
		in.	in.	in.	in.	in.
Fairmount St..	On north line Haines Ave., 12 ft. east of west line Fairmount St. ....	...	1	...	...	...

SUMMARY.

Low Service water pipe laid in 1917.....	6,231. ft.
Low Service water pipe laid previous to 1917	785,317.5 ft.
	791,548.5 ft.
Low Service water pipe removed in 1917...	757. ft.
Total Low Service water pipe in use Jan. 1, 1918	790,791.5 ft.
High Service water pipe laid in 1917.....	763. ft.
High Service water pipe laid previous to 1917	51,947. ft.
	52,710. ft.
High Service water pipe removed 1917.....	517. ft.
Total High Service water pipe in use Jan. 1, 1918	52,193. ft.
Total High and Low Service Jan. 1, 1918.....	842,984.5 ft.
Total pipe in use Jan. 1, 1918, in miles.....	159.65

LOW SERVICE.

4"	34,107 feet
6"	445,652 "
8"	159,881.3 "
10"	31,270.5 "
12"	71,228.8 "
16"	26,235.9 "
20"	8,659 "
24"	9,194 "
30"	4,563 "

HIGH SERVICE.

4"	1,507 feet
6"	30,475.5 "
8"	4,510.5 "
10"	2,931 "
12"	7,885 "
16"	4,884 "

790,791.5 "

52,193 "

Low Service Hydrants set in 1917.....	12
High Service Hydrants set in 1917.....	0
Low Service Hydrants removed in 1917.....	1
High Service Hydrants removed in 1917.....	0

Size

4 in. 6 in. 8 in. 10 in. 16 in.

Low Service Stop Gates set in 1917.....	1	17	9	1	3=31
Low Service Stop Gates removed in 1917...		1	5		= 6
High Service Stop Gates set in 1917.....		1			1= 2
High Service Stop Gates removed in 1917...		1			= 1

Report of the City Engineer

OFFICE OF THE CITY ENGINEER,

LOWELL, MASS., January 1, 1918.

*To the Commissioner of Water Works and Fire
Protection:*

DEAR SIR:—

I have the honor to submit the forty-fifth annual report for the year ending December 31, 1917:

PUMPAGE.

Total Net Pumpage for 1917.....	2,353,368,177 gallons
Total Net Pumpage for 1916.....	2,230,774,582 gallons
Increase in 1917.....	122,593,595 gallons

CONSUMPTION.

Consumption in 1917.....	2,365,101,081 gallons
Consumption in 1916.....	2,231,162,932 gallons
Increase in 1917.....	133,938,049 gallons

The maximum pumpage for any one day was on Friday, August 3rd, viz.:

At West Sixth Street Station.....	7,258,858 gallons
At Cook Wells Station.....	1,854,464 gallons
Total	9,113,322 gallons

The maximum pumpage for one week was of the week July 29th to August 4th, viz.:

At West Sixth Street Station.....	45,597,226 gallons
At Cook Wells Station.....	14,714,501 gallons

Total	60,311,727 gallons
-------------	--------------------

High Service Pumpage for 1917.....	93,953,972 gallons
High Service Pumpage for 1916.....	72,886,632 gallons
Increase in 1917.....	21,067,340 gallons

Cost of Low Service Pumpage in 1917.....	\$22.06 per million gals.
Cost of Low Service Pumpage in 1916.....	\$17.15 per million gals.
Increase in 1917.....	\$ 4.91 per million gals.

Cost of High Service Pumpage in 1917.....	\$22.83 per million gals.
Cost of High Service Pumpage in 1916.....	\$16.74 per million gals.
Increase in 1917.....	\$ 6.09 per million gals.

Cost of Low Service Pumpage, exclusive of Cook Wells, in 1917.....	\$21.64 per million gals.
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Total Cost of High Service Pumpage (Cost of Low Service plus Cost of High Service, ex- clusive of Cook Wells), in 1917.....	\$44.89 per million gals.
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Total Cost of High Service Pumpage (Cost of Low Service plus Cost of High Service, ex- clusive of Cook Wells), in 1916.....	\$34.12 per million gals.
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Increase in 1917.....	\$10.77 per million gals.
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TABLE SHOWING QUANTITY PUMPED EACH MONTH AT THE SEVERAL STATIONS DURING THE YEAR 1917.

Months	PUMPING STATIONS										Grand Totals	Net Totals
	Driven Wells					West Sixth Street						
	Cook Wells	Pawtucket Boulevard			Net Totals	Worthington Low Duty	Allis Chalmers	Total				
		Holly Pump	Kerr Turbine	Totals				Low Service	High Service			
January	189,502,500	194,560,000	384,062,500	.....	.....	199,213,688	199,213,688	5,752,026	589,028,214	199,213,688	
February	172,156,500	172,880,000	345,036,500	.....	.....	176,194,454	176,194,454	6,065,778	527,896,732	176,194,454	
March	190,920,000	192,500,000	383,420,000	.....	.....	192,430,905	192,430,905	5,720,134	581,571,039	192,430,905	
April	180,183,000	180,780,000	360,963,000	.....	.....	179,840,285	179,840,285	5,172,804	545,976,089	179,840,285	
May	179,736,000	180,980,000	360,716,000	.....	.....	182,268,754	182,268,754	5,865,370	548,850,124	182,268,754	
June	181,636,500	174,880,000	356,516,500	.....	42,583,510	141,062,899	183,646,409	9,152,248	549,315,157	183,646,409	
July	20,590,144	197,448,000	193,780,000	411,818,144	20,590,144	.....	202,129,769	13,508,586	627,456,499	222,719,913	
August	52,809,728	180,610,500	175,210,000	408,630,228	52,809,728	.....	186,054,419	13,545,658	608,230,305	238,864,147	
September	192,565,500	187,150,000	379,715,500	.....	.....	.....	192,424,094	10,182,788	582,322,382	192,424,094	
October	192,937,500	185,650,000	378,587,500	.....	.....	.....	191,259,274	5,414,766	575,261,540	191,259,274	
November	185,023,500	187,090,000	372,113,500	.....	.....	.....	191,528,934	5,486,628	569,129,062	191,528,934	
December	163,822,500	161,090,000	362,807,860	37,895,360	.....	.....	165,081,960	7,487,186	535,377,006	165,081,960	
Totals	111,295,232	2,206,542,000	2,186,550,000	4,504,387,232	111,295,232	42,583,510	2,199,489,435	93,953,972	6,840,414,149	2,353,368,177	

TABLE SHOWING SOURCE OF SUPPLY, QUANTITY PUMPED, AND COST OF
PUMPING AT THE SEVERAL STATIONS DURING THE YEAR 1917.

PUMPING STATION	Source of Supply—Well Water				Cost	
	525 Driven Wells at Pawtucket Boulevard	210 Driven Wells in Valley of River Meadow Brook	Distributing Mains of Low Service System	Totals in U. S. Gallons	Totals	Per Million Gallons
West Sixth Street—Low Service.....	2,242,072,945	.....	.....	2,242,072,945	\$23,950.99	\$10.68+
High Service.....	.....	.....	93,953,972	93,953,972	2,145.48	22.83+
Cook Wells .....	.....	111,295,232	.....	111,295,232	3,394.91	30.50+
Lower Boulevard	2,186,550,000	.....	.....	2,186,550,000	24,571.62	11.23+
Total Pumpage .....	.....	.....	.....	4,633,872,149	54,063.03	11.67+
Deduct Quantity at Lower Boulevard.....	2,186,550,000	.....	93,953,972	2,280,503,972	.....	.....
Pumped by High Service.....	.....	.....	.....	.....	.....	.....
Net Pumpage .....	.....	.....	.....	2,353,368,177	54,063.03	22.97+
Cost exclusive of High Service.....	.....	.....	.....	2,353,368,177	51,917.55	22.06+
Cost exclusive of High Service and Cook Wells .....	.....	.....	.....	2,242,072,945	48,522.64	21.64+
Total Cost High Service Pumpage.....	.....	.....	.....	93,953,972	4,217.61	44.89+

The following tables, showing the performance of the engines, depth and quantity of water in the Beacon Street Reservoir and Christian Street Reservoir, average temperature of the air and water at the Christian Street Reservoir, and the average monthly and daily consumption of water, have been calculated and compiled from the records kept by the engineers and gatekeeper.

TABLE SHOWING WORK DONE WITH ALLIS-CHALMERS ENGINE, AT WEST
SIXTH STREET PUMPING STATION, FOR EACH MONTH DURING
THE YEAR 1917.

Months	No. of days Pumping.	Average No. of hours Pumping per day	No. of hours Pumping per Month	No. of strokes made per Month	Average No. of strokes per Minute	Average head including friction in feet	Quantity Pumped per month in U. S. Gallons	Average Quantity Pumped per day in U. S. Gallons	Galls. of water pumped into res. per lb. of coal consumed	Duty in lbs. 1 foot high coal used in Pumping only no deduction for ashes or clinkers	Duty on total coal consumed, no deduction for ashes or clinkers
January	31	24-	744	1,433,192	32.10	189.97	199,213,688	6,426,248	976	154,568,769	154,568,769
February	28	23-54	669	1,267,586	31.58	166.09	176,194,454	6,292,659	1,070	147,961,142	147,961,142
March	31	23-56	742	1,384,295	31.10	188.65	192,430,905	6,207,449	980	154,426,165	154,426,165
April	30	24-	720	1,293,815	29.90	190.40	179,840,285	5,994,676	958	152,017,595	152,017,595
May	31	24-	744	1,311,256	29.37	190.29	182,268,754	5,879,637	920	145,667,226	145,667,226
June	24	22-43	545	1,014,841	31.03	190.24	141,062,899	5,877,621	920	146,529,632	146,529,632
July	31	23-38	732½	1,454,171	33.11	190.61	202,129,769	6,520,315	955	151,153,672	151,153,672
August	31	23-44	736	1,338,521	30.31	190.41	186,054,419	6,001,755	930	147,605,158	147,605,158
September	30	23-52	716	1,384,346	32.22	190.20	192,424,094	6,414,136	905	143,483,573	143,483,573
October	31	24-	744	1,375,966	30.82	191.94	191,259,274	6,169,654	1,010	161,834,002	161,834,002
November	30	23-42	711	1,377,906	32.30	191.83	191,528,934	6,384,298	986	157,775,840	157,775,840
December	31	22-43	704	1,187,640	28.11	176.67	165,081,960	5,325,224	1,035	152,850,254	152,850,254
Totals and Averages	359	23-42	8,507½	15,823,665	31.00	187.38	2,199,489,435	6,126,711	968	149,919,634	149,919,634

TABLE SHOWING WORK DONE WITH WORTHINGTON HIGH SERVICE ENGINE,
AT WEST SIXTH STREET PUMPING STATION FOR EACH MONTH
DURING THE YEAR 1917.

Months	No. of days Pumping	Average No. of hours Pumping per day	No. of hours Pumping per Month	No. of strokes made per Month	Average No. of strokes made Minute	Average head including friction in feet	Quantity Pumped per month in U. S. Gallons	Average Quantity Pumped per day in U. S. Gallons	Galls. of water pumped into res. per lb. t't'l coal consumed	Coal in pounds used when pumping
January	24	14-50	356	410,859	19.23	39.17	5,752,026	239,668	252	23,002
February	27	16-7	435	476,127	18.24	63.20	6,665,778	246,907	249	26,699
March	30	12-32	476	408,581	14.30	40.97	5,720,134	190,671	252	22,868
April	30	13-22	401	369,486	15.36	39.17	5,172,804	172,427	252	20,513
May	31	17-4	529	418,955	13.20	39.17	5,865,370	189,206	249	23,503
June	30	22-10	665	653,732	16.38	57.60	9,152,248	305,075	251	36,487
July	31	24-00	744	964,899	21.61	69.12	13,508,586	435,761	250	54,015
August	31	24-00	744	964,547	21.68	68.90	13,545,658	436,957	248	54,506
September	30	24-00	720	727,342	16.83	69.12	10,182,788	339,426	248	41,285
October	31	16-58	514	386,769	12.54	67.34	5,414,766	174,670	250	21,685
November	30	14-52	446	391,902	14.65	37.04	5,486,628	182,888	238	23,046
December	31	22-8	686	534,799	12.99	53.30	7,487,186	241,522	252	29,734
Totals and Averages	356	18-52	6,716	6,710,998	16.65	53.63	93,953,972	263,916	249	377,343

TABLE SHOWING WORK DONE WITH DEANE ENGINES AT COOK WELLS
PUMPING STATION FOR EACH MONTH DURING THE YEAR 1917.

Months	No. of days Pumping	Average No. of hours Pumping per day	No. of hours Pumping per Month	No. of strokes made per Month	Average No. of strokes made per Minute	Average head including friction in feet	Quantity Pumped in U. S. Gallons	Average Quantity Pumped per day in U. S. Gallons	No. Galls. of water pumped into dis. mains per lb. of coal consumed	Duty in lbs. 1 foot high coal used in Pumping only no deduction for ashes or clinkers
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	9	21-53	197	321,721	27.22	215.32	20,590,144	2,287,794	189	34,006,097
August	32	23-35	731	825,152	18.71	212.05	52,809,728	1,703,539	243	42,867,242
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	18	22-53	412	592,115	24.30	161.69	37,895,360	2,105,298	201	27,280,040
Totals and Averages	58	23-10	1,340	1,738,988	23.41	193.21	111,295,232	1,918,883	211	34,896,004

TABLE SHOWING WORK DONE WITH WORTHINGTON DUPLEX ENGINE AT
WEST SIXTH STREET PUMPING STATION FOR EACH MONTH
DURING THE YEAR 1917.

Months	No. days Pumping	Average No. of hours Pumping per day	No. of hours Pumping per Month	No. of strokes made per Month	Average No. of strokes made per Minute	Average head including friction in feet	Quantity Pumped per month in U. S. Gallons	Average Quantity Pumped per day in U. S. Gallons	No. of Galls. of water pumped into res. per lb. of coal consumed	Duty in lbs. 1 foot high coal used in Pumping only no deduction for ashes or clinkers	Duty on total coal consumed, no deduction for ashes or clinkers
January
February
March
April
May
June	8	21-53	175	137,366	13-08	160.08	42,583,510	5,322,939	455	60,846,820	60,846,820
July
August
Sept.
Oct.
Nov.
Dec.
Totals & Averages	8	21-53	175	137,366	13-08	160.08	42,583,510	5,322,939	455	60,846,820	60,846,820

TABLE SHOWING WORK DONE WITH HOLLY HIGH DUTY ENGINE (CRANK AND FLY WHEEL) AT LOWER BOULEVARD PUMPING STATION, FOR EACH MONTH DURING THE YEAR 1917.

Months	No. of days Pumping	Average No. of hours Pumping per day	No. of hours Pumping per Month	No. of strokes made per Month	Average No. of strokes made per Minute	Average head including friction in feet	Quantity Pumped per month in U. S. Gallons	Average Quantity Pumped per day in U. S. Gallons
January	31	23-31	729-00	1,263,350	28.88	56.78	189,502,500	6,112,984
February ...	28	23-23	663-00	1,147,710	28.85	58.11	172,156,500	6,148,447
March	31	23-50	739-00	1,272,800	28.70	58.57	190,920,000	6,158,710
April	30	23-43	711-30	1,201,220	28.14	57.85	180,183,000	6,006,100
May	31	23-58	743-00	1,198,240	26.88	57.00	179,736,000	5,797,936
June	30	23-49	714-30	1,210,910	28.24	54.76	181,636,500	6,054,550
July	31	23-19	723-00	1,316,320	30.34	55.94	197,448,000	6,369,290
August	31	23-26	726-30	1,204,070	27.62	55.51	180,610,500	5,826,145
September ..	30	23-46	713-00	1,283,770	30.01	56.00	192,565,500	6,418,850
October	31	23-35	731-00	1,286,250	29.32	55.91	192,937,500	6,223,790
November ..	30	23-18	699-00	1,233,490	29.41	56.95	185,023,500	6,167,450
December ..	31	22-53	709-30	1,092,150	25.65	57.59	163,822,500	5,284,597
Totals and Averages .	365	23-34	8,602-00	14,710,280	28.50	56.74	2,206,542,000	6,045,321

TABLE SHOWING AMOUNT OF COAL USED FOR
ALLIS-CHALMERS ENGINE AT PUMPING
STATION, WEST SIXTH STREET,
DURING THE YEAR 1917.

Months	Coal Consumed			
	For starting Fires, in Pounds	When Pumping, in Pounds	For Banking Fires in Pounds	Total
January		204,270		204,270
February		165,006		165,006
March		196,125		196,125
April		187,924		187,924
May		198,650		198,650
June		153,148		153,148
July		212,657		212,657
August		200,239		200,239
September		212,809		212,809
October		189,252		189,252
November		194,282		194,282
December		159,191		159,191
Totals		2,273,553		2,273,553

Gallons pumped per pound total coal consumed—968.

TABLE SHOWING AMOUNT OF COAL USED FOR
DEANE ENGINES AT PUMPING STATION,
COOK WELLS, DURING THE YEAR 1917.

Months	Coal Consumed			
	For starting Fires, in Pounds	When Pumping, in Pounds	For banking Fires, in Pounds	Total in Pounds
January				
February				
March				
April				
May				
June				
July	10,000	98,771		108,770
August		217,946		217,946
September				
October				
November				
December		187,390		187,390
Totals	10,000	504,106		514,106

Gallons pumped per pound of total coal consumed—211.

TABLE SHOWING AMOUNT OF COAL USED FOR
 WORTHINGTON DUPLEX ENGINE AT PUMP-
 ING STATION, WEST SIXTH STREET,
 DURING THE YEAR 1917.

Months	Coal Consumed			
	For starting Fires, in Pounds	When Pumping, in Pounds	For banking Fires, in Pounds	Total in Pounds
January				
February				
March				
April				
May				
June		93,468		93,468
July				
August				
September				
October				
November				
December				
Totals		93,468		93,468

Gallons pumped per pound total coal consumed—455.

TABLE SHOWING AMOUNT OF COAL USED FOR
HOLLY ENGINE AND KERR TURBINE AT
PUMPING STATION, LOWER BOULEVARD,
DURING THE YEAR 1917.

Months	Coal Consumed				Gals. pumped into conduit per lb. total coal consumed
	For starting Fires, in Pounds	When Pumping in Pounds	For banking Fires, in Pounds	Total in Pounds	
January .....	.....	220,185	.....	220,185	883
February	1,000	213,935	.....	214,935	804
March .....	.....	237,835	.....	237,835	811
April .....	.....	235,515	.....	235,515	768
May .....	.....	191,290	.....	191,290	945
June	1,000	174,165	.....	175,165	997
July	1,000	196,775	.....	197,775	980
August .....	.....	179,030	.....	179,030	978
September	1,000	193,115	.....	194,115	965
October	1,000	198,445	.....	199,445	930
November .....	.....	206,720	.....	206,720	905
December	1,000	214,815	.....	215,815	750
Totals	6,000	2,461,825	.....	2,467,825	887

WEST SIXTH STREET PUMPING STATION, ALLIS-
CHALMERS ENGINE RUNNING EXPENSES
FOR THE YEAR 1917.

Pay of Engineers and Firemen.....	\$11,925.81
66 1233-2240 tons (1916) coal at \$6.33.....	421.12
980 1262 2240 tons (1917) coal at \$9.49.....	9,306.29
Engine Repairs	112.70
Boiler Repairs	455.46
Elec. Engine Repairs.....	120.70
Supplies	818.78
Sundries	113.31
<hr/>	
Total	\$23,274.17

Cost of pumping water into reservoir, per million gallons, \$10.58+

Cost of pumping water 1 foot high, per million gallons, \$0.05 65/100

WEST SIXTH STREET PUMPING STATION, HIGH
SERVICE ENGINE RUNNING EXPENSES
FOR THE YEAR 1917.

Pay of Engineers and Firemen.....	\$ 506.41
10 2058-2240 tons of coal (1916) at \$6.33.....	69.14
160 2213-2240 tons of coal (1917) at \$9.49.....	1,527.90
Engine Repairs	0.40
Supplies	41.63
<hr/>	
Total	\$2,145.48

Cost of pumping water into reservoir, per million gallons, \$22.83+

Cost of pumping water 1 foot high, per million gallons, \$0.42 6/10

WEST SIXTH STREET PUMPING STATION, WORTHINGTON
DUPLEX ENGINE RUNNING EXPENSES
FOR THE YEAR 1917.

Pay of Engineers and Firemen.....	\$227.88
42 388-2240 tons coal at \$10.50.....	442.83
Supplies	6.11
<hr/>	
Total	\$676.82

Cost of pumping water into reservoir, per million gallons, \$15.89+

Cost of pumping water 1 foot high, per million gallons, \$0.09 93/100

COOK WELLS PUMPING STATION, DEANE ENGINES
RUNNING EXPENSES FOR THE YEAR 1917.

Pay of Engineers and Firemen.....	\$1,675.33
83 1639-2240 tons of coal (1916) at \$4.64+.....	389.17
142 2188-2240 tons of coal (1917) at \$7.68+.....	1,098.56
Engine Repairs	29.95
Boiler Repairs	73.70
Supplies	94.55
Sundries	33.65

Total \$3,394.91

Cost of pumping water into distributing mains, per million gallons,
\$30.50

Cost of pumping water 1 foot high, per million gallons, \$0.15 79/100

LOWER BOULEVARD PUMPING STATION, HOLLY ENGINE
AND KERR TURBINE RUNNING EXPENSES
FOR THE YEAR 1917.

Pay of Engineers and Firemen.....	\$12,627.78
33 1426-2240 tons of coal (1916) at \$6.82+.....	229.64
1054 365-2240 tons of coal (1917) at \$9.89+.....	10,427.50
Engine Repairs	197.57
Boiler Repairs	101.13
Supplies	820.70
Sundries	167.33

Total \$24,571.65

Cost of pumping water into conduit, per million gallons, \$11.23+

Cost of pumping water 1 foot high, per million gallons, \$0.19 81/000

BEACON STREET RESERVOIR.

Months	Depth in Feet	Quantity in U. S. Gallons	Temperature in Degrees	
			Of Water	Of Air
January	19.34	29,392,117	30.7	24.6
February	19.34	29,392,117	31.3	23.1
March	19.72	30,057,473	31.9	34.9
April	19.75	30,092,737	38.4	42.9
May	19.78	30,129,737	44.7	50.3
June	19.73	30,750,019	59.2	66.2
July	19.63	29,882,080	68.4	75.9
August	19.30	29,200,075	70.3	72.9
September	18.86	28,608,312	59.3	59.5
October	18.80	28,504,158	48.3	48.6
November	18.92	28,556,220	36.6	34.7
December	19.09	28,973,536	31.5	20.3

CHRISTIAN STREET RESERVOIR.

Months	Elevation in Feet	Quantity in U. S. Gallons	Temperature in Degrees	
			Of Water	Of Air
January	207.77	4,131,539	47.5	24.6
February	200.38	2,623,418	46.0	23.1
March	205.29	3,625,585	42.3	34.9
April	208.87	4,356,518	41.1	42.9
May	208.74	4,331,123	40.5	50.3
June	208.35	4,250,572	42.3	66.2
July	206.26	3,820,980	45.6	75.9
August	206.30	3,831,619	50.3	72.9
September	207.32	4,042,201	53.2	59.5
October	208.78	4,337,474	53.8	48.6
November	207.86	4,150,653	53.2	34.7
December	206.04	4,186,841	50.0	20.3

TABLE SHOWING THE AVERAGE MONTHLY
AND DAILY CONSUMPTION OF WATER
FOR THE YEAR 1917.

Months	Gallons per month	Gallons per day
January	200,269,879	6,460,319
February	176,733,315	6,311,904
March	190,964,103	6,160,132
April	179,288,772	5,976,292
May	182,398,731	5,883,830
June	183,794,624	6,126,487
July	224,723,266	7,249,137
August	238,045,168	7,678,877
September	192,625,454	6,420,848
October	190,865,732	6,156,959
November	191,759,227	6,391,974
December	213,632,810	6,891,381
Totals and Averages.	2,365,101,081	6,479,729

The following table shows the average daily consumption of water, in gallons, for each month and each year since the installation of the system.

AVERAGE DAILY CONSUMPTION OF WATER IN GALLONS FOR EACH MONTH AND YEAR FROM JANUARY, 1873, TO DECEMBER, 1917, INCLUSIVE.

YEARS	MONTHS												For the Year
	January	February	March	April	May	June	July	August	Sept.	October	November	December	
1873	308,777	373,437	327,321	356,148	430,301	569,770	836,215	588,634	571,621	531,022	430,646	591,202	511,462
1874	633,810	667,770	638,840	609,470	708,760	919,830	977,360	895,820	880,880	760,560	750,060	890,220	789,206
1875	1,211,480	1,377,880	1,092,070	920,810	1,061,770	1,314,750	1,339,560	1,260,070	1,248,470	1,117,280	1,130,260	1,549,500	1,222,300
1876	1,484,980	1,527,830	1,325,790	1,073,602	1,275,180	1,454,764	2,011,640	1,662,020	1,539,326	1,348,380	1,193,376	1,805,810	1,484,882
1877	1,993,090	1,616,882	1,443,180	1,297,316	1,455,870	1,780,113	1,767,740	1,758,760	1,906,975	1,501,890	1,496,773	1,560,420	1,631,360
1878	2,038,090	1,894,890	1,683,690	1,287,310	1,824,140	1,760,330	2,262,500	1,813,970	1,878,048	1,643,400	1,515,424	1,804,850	1,784,980
1879	2,407,950	2,241,030	1,921,940	1,716,990	2,020,250	1,991,590	2,133,170	2,050,340	1,908,050	1,950,330	1,756,600	2,173,000	2,023,200
1880	1,977,760	2,144,660	1,933,610	1,839,580	2,223,670	2,486,780	2,438,080	2,492,330	2,408,940	2,268,430	2,229,350	2,574,000	2,252,197
1881	3,151,280	3,054,550	2,245,410	2,222,330	2,223,590	2,281,370	2,333,280	2,472,830	2,350,290	2,205,760	2,082,790	2,158,930	2,399,168
1882	2,883,560	2,309,540	2,263,290	2,163,990	2,203,580	2,774,220	3,220,640	3,220,680	2,651,590	2,434,430	2,211,800	2,629,940	2,622,615
1883	3,341,650	3,068,900	2,893,330	2,436,600	2,730,670	2,907,920	2,938,780	3,220,780	2,910,440	2,403,160	2,374,830	3,063,920	2,862,710
1884	3,600,150	3,032,120	3,025,910	2,513,700	2,620,820	3,127,330	3,185,420	3,166,500	3,111,910	2,806,130	2,648,010	3,334,160	3,016,040
1885	4,137,730	4,924,980	3,997,890	3,103,350	2,996,500	3,443,140	3,545,920	3,303,130	3,243,620	3,567,880	3,125,447	3,547,620	3,563,220
1886	4,527,610	4,927,900	4,213,570	3,490,590	3,416,380	3,903,860	4,034,170	3,922,610	3,693,650	3,340,450	3,516,680	4,403,650	3,957,650
1887	5,470,290	4,762,659	4,276,024	3,707,956	4,222,327	4,800,546	4,522,064	4,320,440	4,200,049	3,394,143	3,612,885	4,480,818	4,319,164
1888	6,611,570	6,707,935	5,305,426	4,213,317	4,241,156	4,836,489	4,808,093	4,464,388	4,367,616	4,375,843	4,512,345	5,131,297	4,981,118
1889	4,889,917	5,495,132	4,344,194	4,139,759	4,451,632	4,783,913	4,919,008	4,769,079	4,668,705	4,349,478	4,266,827	4,560,382	4,638,165
1890	5,034,449	5,317,487	5,037,524	4,697,240	4,692,172	5,234,919	6,101,724	5,533,936	5,671,520	5,380,569	5,074,790	6,674,367	5,373,536
1891	6,346,284	6,049,030	5,668,225	5,292,180	5,530,909	6,076,131	6,191,190	6,179,573	6,179,573	5,747,054	5,661,719	5,823,693	5,919,692
1892	5,911,281	6,614,450	6,023,591	5,340,879	5,241,053	6,371,317	6,742,737	6,460,251	6,336,374	6,290,239	5,613,792	5,899,565	6,074,263
1893	8,659,870	8,888,586	6,998,144	5,646,919	5,910,870	6,330,711	6,796,530	6,746,621	6,194,761	6,415,510	5,990,053	7,325,056	6,816,943
1894	7,268,744	7,317,660	6,580,717	6,014,310	6,154,297	6,915,305	7,194,453	6,571,933	6,190,377	5,821,950	5,909,004	6,550,504	6,563,170
1895	7,280,484	8,318,300	6,469,630	6,034,913	6,452,212	7,033,375	7,032,587	7,334,446	7,153,030	6,874,267	6,239,076	7,119,614	6,922,492
1896	8,347,435	7,958,693	6,645,162	6,723,680	7,034,655	7,093,227	7,407,605	7,058,722	6,197,896	5,970,660	5,956,262	6,814,985	6,933,308
1897	7,422,426	7,050,337	6,498,262	6,187,508	6,401,053	6,296,706	6,835,239	6,353,958	6,348,176	6,301,085	6,499,027	6,898,918	6,594,308
1898	7,769,816	7,244,795	6,232,698	6,202,828	6,395,113	6,612,048	7,143,828	6,970,647	6,743,119	6,300,619	6,128,699	6,965,349	6,724,864
1899	8,114,248	8,004,145	6,803,182	6,554,963	6,551,731	8,508,104	8,664,229	7,196,128	7,002,017	7,037,015	6,797,952	6,858,218	7,286,205
1900	7,511,163	8,127,419	8,024,115	7,665,888	7,734,911	8,037,993	8,696,110	8,268,526	8,138,836	7,386,297	7,292,997	7,844,543	7,893,356
1901	8,266,601	9,055,112	8,260,895	6,914,082	6,580,172	7,033,332	7,683,332	6,766,572	6,514,839	6,183,286	5,748,730	6,197,726	7,059,631
1902	6,171,220	6,114,304	5,651,749	5,446,046	5,797,401	6,217,117	7,033,104	5,963,910	5,461,552	5,107,318	4,771,831	5,969,016	5,729,325
1903	6,160,966	6,054,616	5,115,198	5,147,423	5,581,932	5,124,402	5,593,775	5,018,208	4,936,025	4,509,428	4,613,355	5,112,384	5,266,823

AVERAGE DAILY CONSUMPTION OF WATER IN GALLONS FOR EACH MONTH
AND YEAR FROM JANUARY, 1873, TO DECEMBER, 1917, INCLUSIVE—Continued.

YEARS	MONTHS												For the Year
	January	February	March	April	May	June	July	August	Sept.	October	November	December	
1904	6,655,276	7,188,622	5,554,904	4,791,851	5,220,707	5,562,331	5,576,895	5,136,152	5,417,024	4,940,185	4,580,887	5,257,670	5,485,323
1905	5,777,996	6,857,608	5,525,104	5,316,825	5,283,217	5,152,313	5,555,262	5,819,160	5,025,355	5,447,880	4,983,105	5,034,701	5,474,202
1906	4,834,565	5,142,265	5,001,817	4,950,731	5,025,778	5,074,773	5,391,923	5,440,761	5,486,886	4,980,724	4,398,655	5,269,259	5,083,856
1907	5,812,515	6,967,163	5,996,990	5,089,614	5,485,391	5,640,334	5,674,592	6,046,145	5,414,510	5,198,256	4,492,525	4,587,374	5,526,118
1908	4,892,197	6,303,981	5,126,110	4,847,459	4,879,046	5,597,233	6,130,861	5,027,742	5,420,566	5,647,718	4,574,232	4,807,084	5,250,367
1909	4,994,704	5,025,674	4,781,957	4,846,081	4,947,820	5,504,361	6,114,545	6,197,967	5,470,110	5,137,479	4,863,788	5,000,414	5,240,385
1910	5,527,751	5,580,827	5,110,820	5,144,907	5,188,944	5,317,145	6,521,061	6,087,138	5,563,421	5,233,485	4,787,436	5,234,080	5,442,967
1911	5,257,816	5,432,082	5,398,391	5,246,301	6,134,973	6,040,921	6,917,779	5,103,294	4,920,793	4,428,730	4,246,149	4,240,112	5,272,705
1912	6,358,297	6,561,176	5,284,140	4,688,407	4,995,391	5,575,438	7,186,243	6,834,269	4,878,253	4,671,007	4,603,420	4,917,829	5,369,405
1913	4,866,972	5,359,348	5,024,197	4,944,870	5,370,378	6,882,636	7,169,715	6,892,676	5,933,963	5,790,277	5,740,322	5,645,862	5,798,652
1914	6,352,604	6,735,824	5,697,707	5,109,164	5,924,382	6,720,431	6,172,412	6,837,250	6,438,310	5,951,934	5,419,522	5,508,103	5,983,614
1915	5,573,201	5,494,049	5,262,766	5,097,062	5,129,316	5,551,194	5,193,378	5,253,356	6,133,117	5,516,235	5,565,839	5,380,197	5,427,382
1916	5,735,258	5,899,397	6,084,883	5,873,077	6,150,601	6,069,636	6,392,772	6,663,611	6,396,382	6,154,035	5,805,088	5,907,239	6,096,074
1917	6,430,319	6,311,904	6,160,132	5,976,292	5,883,330	6,126,437	7,249,137	7,678,877	6,420,848	6,156,959	6,391,974	6,891,381	6,479,729

SUMMARY OF STATISTICS.

FOR THE YEAR ENDING DECEMBER 31, 1917.

In form recommended by the New England Water Works
Association.

LOWELL WATER WORKS.

LOWELL, MIDDLESEX COUNTY, MASSACHUSETTS.

GENERAL STATISTICS.

Population by census of 1915, 107,978.

Date of construction, 1870 to 1873.

Date of construction, High Service, 1881.

Date of construction, Driven Wells, 1893 to 1912.

By whom owned? The City of Lowell.

Source of supply: Two hundred ten (210) driven wells in the valley
of River Meadow Brook, and five hundred twenty-five (525)
driven wells at Pawtucket Boulevard.

Mode of supply: Pumping to reservoir and pumping direct.

PUMPING STATISTICS.

1. Builders of Pumping Machinery.

AT WEST SIXTH STREET STATION:

One engine, capacity 5,000,000 gallons in twenty-four hours,
Henry R. Worthington.

One engine, capacity 500,000 gallons in twenty-four hours,
Henry R. Worthington.

One engine, capacity 8,000,000 gallons in twenty-four hours,
Allis-Chalmers Company.

AT COOK WELLS STATION, TEMPORARY PUMPS:

One engine, capacity 3,000,000 gallons in twenty-four hours, The
Deane Steam Pump Company.

One engine, capacity 3,000,000 gallons in twenty-four hours, The
Deane Steam Pump Company.

AT LOWER BOULEVARD STATION:

- One engine, capacity 8,000,000 gallons in twenty-four hours, The Holly Manufacturing Company.
 One engine, capacity 8,000,000 gallons in twenty-four hours, The Holly Manufacturing Company.
 One engine, capacity 7,000,000 gallons in twenty-four hours, The Kerr Turbine Company.
 One engine, capacity 10,000,000 gallons in twenty-four hours, The Kerr Turbine Company.

AT UPPER BOULEVARD STATION, TEMPORARY PUMPS:

- One engine, capacity 3,000,000 gallons in twenty-four hours, Henry R. Worthington.
 One engine, capacity 3,000,000 gallons in twenty-four hours, Henry R. Worthington.

2. Descriptions of fuel used:

{	a. Kind, Bituminous. b. Brand of coal, New River. c. Average price of coal per gross ton delivered, \$9.40. d. Percentage of ash. e. Wood, price per cord.
---	--
3. Coal consumed for the year, 5,769,572 pounds.
4. Pounds of wood $\div 3$ = equivalent amount of coal.
5. Total equivalent coal consumed for the year (3) + (4)
 5,769,572 pounds.
6. Total pumpage for the year, 4,633,872,149 gallons.
7. Average static head against which Low Service pumps at West Sixth Street work, 180.69 feet.
 Average static head against which pump at Lower Boulevard works, 45.31 feet.
8. Average dynamic head against which pumps work:

West Sixth Street, Low Service.....	187.38
West Sixth Street, High Service.....	53.63
Lower Boulevard	56.74
9. Number of gallons pumped per pound of equivalent coal (5) =
 803.

10. Cost of pumping per million gallons, figured on pumping station expenses, viz., \$54,063.03, \$11.67.
11. Cost of purifying per million gallons, figured on filter expenses, viz., \$9,860.14, \$4.51—.

STATISTICS OF CONSUMPTION OF WATER.

1. Estimated total population at date, 107,978.
2. Estimated population on lines of pipe, 107,978.
3. Estimated population supplied, 107,978.
4. Total consumption for the year, 2,365,101,081 gallons.
5. Passed through meters, 1,356,594,637 gallons.
6. Percentage of consumption metered, 57.35.
7. Average daily consumption, 6,479,729 gallons.
8. Gallons per day to each inhabitant, 60.01.
9. Gallons per day to each consumer, 60.01.
10. Gallons per day to each tap, 467.08.
11. Cost of supplying water per million gallons, figured on total maintenance (item C. C.), \$75.08.
12. Total cost of supplying water per million gallons, figured on total maintenance and interest on bonds, \$100.05.

STATISTICS RELATING TO DISTRIBUTION SYSTEM.

Mains.

1. Kind of pipe, cast iron.
2. Sizes, 4 inches to 30 inches.
3. Extended 5,720 feet during the year.
4. Total now in use, 159.65 miles.
5. Length of pipe less than 4 inches diameter, 2 miles, more or less.
6. Number of hydrants added during the year (public and private), 11.
7. Number of hydrants (public and private) now in use, 1,446.
8. Number of stop gates added during the year, 26.
9. Number of stop gates now in use, 2,110.
10. Number of stop gates smaller than 4 inches, 42.
11. Number of blow-offs, 33.
12. Range of pressure on mains, 27 lbs. to 82 lbs., Low Service.

SERVICES.

13. Kind of pipe, lead, lead-lined iron, iron and tin-lined iron.
14. Sizes, $\frac{5}{8}$ in. to 8 in.
15. Extended 7,022 feet.
16. Total now in use, 105.06 miles.
17. Number of Service Taps added during the year, 178.
18. Number now in use, 13,873.
19. Average length of service, 40.0 feet.
20. Average cost of service for the year, \$53.23.
21. Number of meters added, 233.
22. Number now in use, 11,889.
23. Percentage of services metered, 85.7.
24. Percentage of receipts from metered water ($B \div C$), 92.0.

The State Board of Health has made analyses of water each month from the Merrimack River (for record only), wells at Pawtucket Boulevard and Low Service Reservoir, a record of which is annexed.

Respectfully submitted,

STEPHEN KEARNEY,

City Engineer.

ANNUAL REPORT
OF THE
Births, Marriages
and Deaths
OF THE
CITY OF LOWELL



FOR THE YEAR

1917

CITY OF LOWELL

OFFICE OF THE CITY CLERK, May 7, 1918.

To the Municipal Council,

GENTLEMEN :

The annual report of Births, Marriages and Deaths for the year 1917, as of record in this office, is respectfully submitted as follows :

BIRTHS

Wards	1	2	3	4	5	6	7	8	9	Ward not given	Total
Whole											
Number	198	506	318	329	307	802	233	273	192	53	3211
Males	109	254	167	181	144	403	125	136	82	31	1632
Females	89	252	151	148	163	399	108	137	110	22	1579
American											
Parents	67	56	141	76	74	168	92	157	93	2	926
Foreign											
Parents	91	420	100	203	199	423	76	54	58	50	1674
American Father	19	14	35	28	17	102	25	28	22		290
Foreign Mother											
Foreign Father	21	16	42	22	17	109	40	34	19	1	321
American Mother											
Twins	2	5	7	3	4	9	4	1			35

In addition there are recorded 54 blrths, the parents being residents elsewhere, and 27 births occuring elsewhere the parents being residents of Lowell. Still births not included 137.

MARRIAGES

Fourteen hundred and twenty-three marriages were recorded in the year 1917, twelve hundred and sixty-two being solemnized in Lowell and 161 solemnized elsewhere.

MARRIAGES BY MONTHS

January	101	May	99	September	133
February	124	June	198	October	142
March	27	July	111	November	139
April	146	August	111	December	92

NATIONALITY OF PARTIES

	Grooms	Brides
United States.....	741	748
Canada	176	168
Greece.....	140	136
Austria and Russia.....	112	109
Portugal, Azores and Madeira.....	78	74
Ireland	54	79
England.....	50	50
Scotland.....	13	17
Sweden	15	8
Italy.....	14	8
Turkey	5	5
Other countries.....	26	20

Grooms under 21 years 96; brides under 18 years 58.

DEATHS

The number of deaths in the city returned and recorded in 1917, exclusive of still-births, was 1938—males 1010; females 928; sixty-two of this number being non-residents.

The deaths of 118 Lowell residents who died elsewhere were also recorded. Still-births 137.

Detailed statistics may be obtained in the report of the Board of Health.

Respectfully

STEPHEN FLYNN,

City Clerk.

In Municipal Council, May 7, 1918.

Received and ordered on file.

STEPHEN FLYNN,

City Clerk.

FORTIETH ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

CITY OF LOWELL



For the Year

1917

PRINTED BY C. I. HOOD CO., LOWELL, MASS.

ORGANIZATION, 1917

BOARD OF HEALTH

PIERRE BRUNELLE, M. D., Chirman

THOMAS F. CARROLL, M. D.

JOHN E. DRURY

HEALTH DEPARTMENT OFFICERS

Office Employees

FREDERICK A. BATES, Agent

SPENCER BROWN, Fumigator

JOHN N. DRURY, M. D., Tuberculosis Examining Physician

WILLIAM A. JOHNSON, M. D., Physician

BERTHA E. MULVEY, R. N., Nurse

THOMAS B. SMITH, M. D., Bacteriologist to Aug. 15, 1917. Succeeded by

MARSHALL L. ALLING, M. D.

KATHARINE W. SNOW, Registrar

INSPECTORS

FRANCIS J. O'HARE, Inspector of Contagious Diseases

STEPHEN GARRITY, Plumbing Inspector

WILLIAM H. CONNORS, Tenement House Inspector

JOHN KEARNEY, Health Inspector

CLEMENT A. HAMBLET, M. D. V., Inspector of Meats and Provisions

MILK DEPARTMENT

MELVIN F. MASTER, B. S., Milk Inspector

JOHN J. COUGHLIN, Collector of Samples

PRIVATE SCHOOL PHYSICIANS

DR. HOWARD W. JEWETT

DR. RODRIGUE MIGNAULT

DR. FREDERICK P. MURPEY

DR. RALPH C. STEWART

LOWELL, MASS., Jan. 1, 1918.

*To the Honorable Mayor and Members of the Municipal
Council of the City of Lowell.*

GENTLEMEN :—

The Board of Health herein respectfully presents its
fortieth annual report.

Chairman,
Board of Health.

INSPECTOR OF MILK.

LOWELL, MASS., Jan. 1, 1918.

*To the Lowell Board of Health,
Lowell, Mass.*

GENTLEMEN :—

I have the honor to present the report of the Department of Milk, Vinegar and Oleomargarine inspection for the twelve months beginning Jan. 1, 1917.

One thousand two hundred fifty-nine (1,259) samples of milk were examined, and the percentages of total solids, fats, solids not fat, ash, etc., were determined.

During the month of February over a thousand milk license application blanks were mailed to the local stores where milk was likely to be sold. As a result of mailing these blanks and visiting stores and milk plants, six hundred fifty-nine (659) permits and milk licenses were issued.

COURT CASES.

One case, milk below standard, was prosecuted, found guilty and fined \$10.00. Seven cases of adulterated milk were prosecuted, two were not prosecuted, one was discharged, one was fined \$50.00 and appealed, one was fined \$50.00 and sentenced to sixty days in jail, an appeal was entered, one case is still unfinished in the local court.

Wagon Licenses issued.....	61	\$ 30.50
Store Licenses issued.....	574	287.00
Oleomargarine Licenses issued.....	24	12.00
	<hr/>	<hr/>
	659	\$329.50

The work of the Milk Department was considerably interrupted during the busy season of the year because at the call of the President, March 30, 1917, M. F. Master, the Milk Inspector, responded to the call, he at that time holding a commission as first lieutenant in Co. K 6th Mass. Infantry.

During Mr. Master's absence Mr. William W. Dennett, principal of the Charles Morey School, very generously gave up his spare time and efficiently carried on the work of the Inspector. Mr. John J. Coughlin, Collector of Milk Samples, also generously put in a large amount of time and labor in an endeavor to keep the work of the department going smoothly during the Inspector's absence.

Respectfully submitted,

MELVIN F. MASTER, B. S.,

Inspector of Milk and Vinegar.

REPORT OF BACTERIOLOGIST.

LOWELL, MASS., Jan. 1, 1918.

Board of Health,
Lowell, Mass.

GENTLEMEN :—

I have the honor hereby to submit to you the following report of the work done in the Bacteriological Laboratory during the year ending Dec. 31, 1917 :

DIPHTHERIA.

Examination of Cultures.

	For Diagnosis		For Release		No	Whole
	Positive	Negative	Positive	Negative	Result	Number
January	29	85	11	36	6	167
February	31	105	13	36	1	186
March	29	108	14	40	3	194
April	28	150	14	34	4	230
May	51	75	12	25	0	163
June	71	65	26	48	12	222
July	33	72	45	97	9	256
August	8	36	4	17	0	65
September	11	54	7	13	1	86
October	21	88	11	25	0	145
November	50	267	32	59	2	410
December	39	199	36	62	4	340
	401	1304	225	492	42	2464

TUBERCULOSIS.

Examination of Sputum.

	Positive	Negative	Whole Number
January	29	79	108
February	10	63	73
March	19	74	93
April	12	38	50
May	18	75	93
June	9	51	60
July	16	41	57
August	11	29	40
September	8	38	46
October	13	30	43
November	15	38	53
December	16	33	49
	<hr/>	<hr/>	<hr/>
	176	589	765

TYPHOID FEVER.

Examination of Blood for Widal Reaction.

	Positive	Negative	No Result	Whole Number
January	1	19	1	21
February	2	21	0	23
March	4	14	0	18
April	1	17	2	20
May	3	16	0	19
June	2	18	0	20
July	3	32	0	35
August	5	22	0	27
September	6	28	0	34
October	1	32	0	33
November	2	25	0	27
December	0	10	0	10
	<hr/>	<hr/>	<hr/>	<hr/>
	30	254	3	287

MALARIA.

Three specimens of blood were examined for the presence of the Malarial Parasite, with negative results.

CEREBRO-SPINAL MENINGITIS.

The cerebro-spinal fluid from 46 specimens of meningitis was examined. In 19 of these cases the Meningococcus of Epidemic Cerebro-Spinal Meningitis was found.

OPHTHALMIA NEONATORUM.

- 1 case showed Gonococcus
- 1 case showed Staphylococci
- 1 case showed Morax-Axenfeld Bacillus
- 1 case showed Intracellular Diplococci

Twenty-four specimens of various character, including exudates and pus from abscesses and ulcers were also examined.

Yours respectfully,

MARSHALL L. ALLING, M. D.,

Bacteriologist.

REPORT OF EXAMINING PHYSICIAN AT TUBERCULOSIS CLINIC.

LOWELL, MASS., Jan. 1, 1918.

*Board of Health,
Lowell, Mass.*

GENTLEMEN :—

I have the honor to submit a report of the work done by me as Examining Physician from Jan. 1, 1917, to Dec. 31, 1917:

Total number of Examinations.....	246
Total number New Cases.....	105
Total number Tubercular Cases.....	85
Total number Non-Tubercular Cases.....	20

TUBERCULAR CASES.

Incipient	17
Moderately Advanced	19
Advanced	21
Other Forms	7

NON-TUBERCULAR CASES.

Exposed	21
Non-Tubercular { Anemia { Bronchitis { Cardiac }	20

COMMENTS.

The number of new cases during the past year was 105 cases, as compared with 70 new cases last year. It shows an increase of 50% over the pervious year. Owing

to conditions existing at the present time it is only fair to assume this increase will continue during the present year.

To supervise this increased number of new cases of Tuberculosis properly more help is badly needed—at least one more nurse is needed at the present time.

A new plan for the supervision of the Tubercular work of the City was proposed and accepted by the Board of Health during the past year, but owing to insufficient help was only partly carried out.

All incipient and moderately advanced cases of Tuberculosis are strongly advised to enter the State Sanatoria and every effort made to have them admitted. It takes from eight to twelve weeks before these cases can be admitted to the State Sanatoria after they have been accepted. It is unfortunate we have no place to send these cases until they can be admitted to the Sanatoria. The most needy cases are sent to the City Tubercular Hospitals at Lynn and Lawrence.

The advanced cases, owing to the fact they are advanced, are not accepted at the State Sanatoria, and as many of these cases as possible are sent to the Tubercular Hospitals in the various cities of Massachusetts.

When the new hospital is completed all these cases will then be able to have hospital care. By taking care of the advanced cases the City will be protected from the chief source of infection, and as 25% of these cases will become arrested under proper care and treatment, the City owes it to the unfortunate individual that he may again become a useful member of the community, and besides the City will be protected from the chief source of this disease.

Respectfully submitted,

JOHN N. DRURY, M. D.

REPORT OF HEALTH DEPARTMENT NURSE.

 LOWELL, MASS., Jan. 1, 1918.

Board of Health,
Lowell, Mass.

GENTLEMEN :—

Following is a report of work done by me from Jan. 1, 1917, to Dec. 31, 1917, as Nurse for the Health Department :

Number of cases of Tuberculosis examined.....	246
Number of visits made on Tuberculosis patients.....	1,693
Number of Ophthalmia Neonatorum cases turned over to Board of Health Nurse.....	19
Number of visits made on Ophthalmia cases.....	157

Respectfully submitted,

BERTHA E. MULVEY, R. N.

INSPECTOR OF MEATS AND PROVISIONS.

LOWELL, MASS., Jan. 1, 1918.

Board of Health,
Lowell, Mass.

GENTLEMEN :—

The following is a report of the work done by the
 Inspector of Meats and Provisions for the year 1917:

INSPECTION OF STORES.

Number of Inspections Made of Stores.....	2,650
One carcase of beef condemned, not being stamped	

INSPECTION OF MEAT AT TIME OF
SLAUGHTER.

Number of Carcasses of Swine.....	425
Number of Carcasses of Swine Condemned.....	11

Respectfully submitted,

C. A. HAMBLET, M. D. V.

REPORT OF PLUMBING INSPECTOR.

LOWELL, MASS., Jan. 1, 1918.

Board of Health,
Lowell, Mass.

GENTLEMEN :—

The following is a report of the plumbing work done
for the year ending Dec. 31, 1917 :

Whole Number of Applications for Permits to do Plumbing...	967
New Buildings	188
Old Buildings	779
	<hr/>
	967
Total Visits	4,175

Respectfully submitted,

STEPHEN GARRITY,

WILLIAM H. CONNORS,

Plumbing Inspectors.

Notices to abate the following nuisances were sent from this office during the year 1917:

Clogged sink waste pipes.....	9
Clogged drains	15
Clogged water closets.....	7
Clogged cesspools	1
Leaky sink waste pipes.....	18
Leaky water closets.....	6
Leaky roofs	1
Insufficient water supply to tenements.....	2
Dilapidated woodwork around water closets.....	1
Filthy tenements	3
Filthy stables	3
No water supply to water closets.....	35
Rubbish in cellars.....	32
Rubbish in yards.....	88
No cover on house traps.....	1
Plaster of ceilings.....	2
Ceilings whitewashed	3
Open back vent pipes.....	1
Manure in yards.....	5
Sewage in cellar.....	3
Overflowing ash chutes.....	1
Removal of hens.....	6
Open drains	2
Surface drainage	1
Contents of dry wells overflowing.....	5
Contents of privy vaults overflowing.....	3
Pigeons in cellar.....	2
Hens in cellar.....	2
Leaky bathtubs	1
Leaky water closet tanks.....	1
Removal of pigs.....	9
Broken water closet bowls.....	1
Complaints investigated	175
Permission granted to clean vaults.....	25
Amusement houses inspected.....	8
Bakeries inspected	65
Ice cream factories inspected.....	13

REPORT OF FUMIGATOR.

LOWELL, MASS., Jan. 1, 1918.

*Board of Health,
Lowell, Mass.*

GENTLEMEN:—

Following is a report of the fumigating work done by me during the year 1917:

Houses	638
Rooms	1,401
Tuberculosis	75
Cerebro-spinal meningitis	9
Infantile paralysis	7
Cancer	5
Typhoid	3
Smallpox	1

Respectfully submitted,

SPENCER D. BROWN,

Fumigator.

MEDICAL INSPECTION PRIVATE SCHOOLS

1917.

Number of calls.....	436
Number examined	4,664
Number advised	909
Number excluded	82

CASES OF CONTAGIOUS DISEASES REPORTED.

	1917	1916	1915
Diphtheria, including Croup.....	438	308	206
Scarlet Fever	77	102	121
Measles	360	1,180	164
Typhoid Fever	37	61	112
Smallpox	1	1	0
Cerebro-spinal Meningitis	17	9	6
Infantile Paralysis	9	17	12
Tuberculosis	244	223	212
	<hr/>	<hr/>	<hr/>
	1,183	1,901	833

DEATHS FROM CONTAGIOUS DISEASES.

	1917	1916	1915
Diphtheria, including Croup.....	24	41	25
Scarlet Fever	3	6	0
Measles	4	14	0
Typhoid Fever	7	13	18
Smallpox	0	0	0
Cerebro-spinal Meningitis	10	7	6
Infantile Paralysis	2	4	3
Tuberculosis	177	149	133
	<hr/>	<hr/>	<hr/>
	227	234	185

CASES OF DIPHTHERIA REPORTED TO THE BOARD OF HEALTH 1917.

	Cases	Deaths
January	36	4
February	40	5
March	38	1
April	33	3
May	48	6
June	67	1
July	47	0
August	8	0
September	13	0
October	19	1
November	50	1
December	39	2
	<hr/>	<hr/>
	438	24

Mortality of Diphtheria, 5.5 per cent.

MORTALITY OF DIPHTHERIA.

	1894	.....	33.0 per cent.
	1895	.....	44.0
Antitoxin Treatment	1896	.....	43.0
	1897	.....	23.0
	1898	.....	23.0
	1899	.....	18.0
	1900	.....	10.0
	1901	.....	12.0
	1902	.....	9.5
	1903	.....	10.5
	1904	.....	11.0
	1905	.....	6.0
	1906	.....	9.0
	1907	.....	7.5
	1908	.....	7.0
	1909	.....	12.5
	1910	.....	9.2
	1911	.....	9.7
	1912	.....	10.4
	1913	.....	9.9
	1914	.....	16.3
	1915	.....	10.6
	1916	.....	13.3
	1917	.....	5.5

SCARLET FEVER.

	1917	1916	1915
Cases reported	77	102	121
Deaths	3	6	0
Per cent. total cases.....	3.9	5.9	0

	Cases Reported	Deaths
February	9	0
March	13	1
April	7	2
May	7	0
June	6	0
July	2	0
August	0	0
September	0	0
October	6	0
November	9	0
December	7	0
	—	—
	77	3

MEASLES.

	Cases Reported	Deaths
January	132	2
February	71	1
March	67	1
April	29	0
May	22	0
June	14	0
July	4	0
August	0	0
September	1	0
October	2	0
November	4	0
December	14	0
	—	—
	360	4

INFANTILE PARALYSIS.

	Cases Reported	Deaths
January	11	0
January	0	0
February	0	0
March	1	0
April	0	0
May	0	0
June	0	0
July	3	1
August	1	0
September	1	0
October	1	1
November	2	0
December	0	0
	<hr/>	<hr/>
	9	2

CEREBRO-SPINAL MENINGITIS.

	Cases Reported	Deaths
January	1	0
February	1	0
March	1	1
April	3	2
May	3	3
June	1	0
July	0	0
August	2	1
September	2	1
October	0	0
November	1	1
December	2	1
	<hr/>	<hr/>
	17	10

TUBERCULOSIS.

	Cases Reported	Deaths
January	36	24
February	17	13
March	20	22
April	14	25
May	27	24
June	18	15
July	14	5
August	15	10
September	14	11
October	18	8
November	24	8
December	27	12
	<hr/>	<hr/>
	244	177

TYPHOID FEVER.

	Cases Reported	Deaths
January	2	1
February	3	3
March	6	1
April	4	1
May	2	0
June	3	0
July	3	0
August	5	0
September	3	0
October	4	0
November	2	0
December	0	1
	<hr/>	<hr/>
	37	7

BOARD OF HEALTH.
TYPHOID FEVER.

	Population	Cases Reported	Deaths
Total 1917	107,978	37	7
Total 1916	107,978	61	13
Total 1915	106,294	112	18
Total 1914	106,294	85	11
Total 1913	106,294	65	11
Total 1912	106,294	86	10
Total 1911	106,294	61	7
Total 1910	106,294	186	22
Total 1909	96,380	91	11
Total 1908	96,380	188	24
Total 1907	96,380	73	9
Total 1906	96,380	30	7
Total 1905	94,889	56	17
Total 1904	104,402	48	17
Total 1903	101,959	238	26
Total 1902	99,574	83	16
Total 1901	94,969	70	18
Total 1900	94,969	85	17
Total 1899	90,114	57	17
Total 1898	87,000	119	24
Total 1897	87,000	105	18
Total 1896	95,700	178	36
Total 1895	84,359	172	33
Total 1894	83,026	282	50
Total 1893	81,694	160	53
Total 1892	80,361	373	75
Total 1891	79,029	293	77
Total 1890	77,696	454	123

A decrease from 1.59 per thousand inhabitants to .06 in twenty-eight years.

VITAL STATISTICS.

	1917	1916	1915
Deaths, male	1,001	1,007	926
Deaths, female	937	957	894
<hr/>			
Total	1,938	1,964	1,820
Children under 1 year.....	459	483	460
Children under 2 years.....	532	593	541
Children under 5 years.....	621	676	598
Per cent. of total deaths under 5 years	32.0	34.4	32.8

BIRTHPLACE.

	Of Deceased	Of Parents
Lowell	860	295
Massachusetts	139	198
Other States	231	477
Ireland	276	1,014
Canada	209	665
Great Britain	101	296
Other Countries	102	703
Unknown	20	228
	<hr/> 1,938	<hr/> 3,876

PLACES OF INTERMENT.

St. Patrick's Cemetery.....	886
Edson	310
Westlawn	121
Lowell	72
St. Joseph's	364
St. Peter's	2
Other Cemeteries	12
Removed from City.....	171
	<hr/> 1,938

PLACES OF DEATH.

Ward 1	132
Ward 2	204
Ward 3	140
Ward 4	139
Ward 5	155
Ward 6	328
Ward 7	129
Ward 8	131
Ward 9	135
Chelmsford St. Hospital.....	158
Lowell Hospital	102
Lowell General Hospital.....	57
St. John's Hospital.....	125
Coram Hospital	3
	<hr/> 1,938
Still births during year.....	137

DEATH RATE.

Population, census	1890	77,696	1,959	25.21
estimated	1891	79,029	1,972	24.95
estimated	1892	80,361	2,224	27.67
estimated	1893	81,694	2,094	25.62
estimated	1894	83,026	1,775	21.28
census	1895	84,359	1,857	22.01
estimated	1896	85,700	1,901	22.18
estimated	1897	87,000	1,855	21.33
estimated	1898	87,000	1,808	20.78
estimated	1899	90,114	1,848	20.50
census	1900	94,969	1,849	19.47
estimated	1901	94,969	2,038	21.45
estimated	1902	99,574	1,935	19.43
estimated	1903	101,959	1,898	18.61
estimated	1904	104,402	1,736	16.61
census	1905	94,889	1,899	20.02
census	1906	96,380	1,918	19.90
census	1907	96,380	2,063	21.40
census	1908	96,380	1,963	20.36
census	1909	96,380	1,885	19.55
census	1910	106,294	2,100	19.76
census	1911	106,294	1,925	18.11
census	1912	106,294	1,891	17.79
census	1913	106,294	1,749	16.45
census	1914	106,294	1,768	16.63
census	1915	106,294	1,820	17.12
census	1916	107,978	1,964	18.19
census	1917	107,978	1,938	17.95

CAUSES OF DEATH

[illegible]

[illegible]

YES

[illegible]

CAUSES OF DEATH

Total for 1917

AGE

SEX

General Diseases—Continued																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
47.	Rheumatism, acute, articular	5	1	1	

CAUSES OF DEATH

CAUSES OF DEATH	Total for 1917																								SEX	
	AGE																								Males	Females
	Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over		
II. Diseases of the Nervous System and of the Organs of Sense																										
60. Encephalitis	1	1				1																			1	
61. Meningitis, simple	11	2	3			5	2		1	1				1	1										7	
61a. Meningitis, epidemic cerebro-spinal	10	2	3	1		7	1	1						1											4	
62. Locomotor ataxia, progressive	3														1				1	1					2	
63. Other diseases of the spinal cord	3		1			1									1										2	
64. Cerebral congestion and hemorrhage	105										1	1	5	11	8	14	18	13	14	10	4	5	1		37	
65. Cerebral softening																									68	
66. Paralysis, without cause assigned	10												1		1	1	3	1	1	1	1				1	
67. General paralysis	1																			1					1	
68. Other forms of mental alienation	1												1												1	
69. Epilepsy	2	1				1																			1	
70. Eclampsia (non-puerperal)	1	1				1																			1	

Total for 1917

CAUSES OF DEATH	AGE																								SEX*	
	Total for 1917																								Males	Females
	Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over		
Diseases of the Nervous System and of the Organs of Sense—Continued																										
71. Convulsions of children.	5	1	1	1	7																				4	3
72. Tetanus																										
73. Chorea					1																					1
74. Hysteria																										
74b. Other affections of the nervous system													1		3		1								4	1
75. Diseases of the eye and appendages																										
76. Diseases of the ear and Infantile Paralysis*.	1	1	1		3		1	1																	1	4
Total of the nervous system, etc.	166	12	4	8	2	0	26	5	2	2	1	1	4	7	18	9	18	20	15	17	11	4	5	1	65	101
III. Diseases of the Circulatory Apparatus																										
77. Pericarditis	1																1								1	
78. Endocarditis, acute	91	1		1	2	4	5	3		1		6	4	5	6	10	8	10	7	12	8	1		1	46	45
79. Organic diseases of the heart	107	3				2	1		2	3	2	3	8	5	7	10	13	15	9	6	9	7	2	2	63	44
80. Angina pectoris	8														1		3	3		1					5	3

CAUSES OF DEATH	Total for 1917	AGE																	SEX								
		AGE																	Males	Females							
		Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over		
Diseases of the Circulatory Apparatus—Concluded																											
81. Affections of the arteries (atheroma aneurism, etc.)	154	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	10	8	22	27	32	24	14	11	5	.....	61 93
82. Embolism and thrombosis...	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4 3
83. Affections of the veins (varices, hemorrhoids, phlebitis, etc.)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84. Affections of the lymphatic system (lymphangitis, etc.)	3	1	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 1
85. Hemorrhages	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
86. Other affections of the circulatory apparatus	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total of circulatory apparatus	372	5	1	1	1	2	9	6	4	3	5	3	10	12	12	15	30	33	51	43	51	41	23	13	8	183	189
IV. Diseases of the Respiratory Apparatus																											
87. Diseases of the nasal fossae	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
88. Affections of the larynx...	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3 2
89. Affections of the thyroid body	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1

CAUSES OF DEATH		AGE																				SEX						
Total for 1917		Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over	Males	Females	
Diseases of the Respiratory Apparatus—Concluded																												
90. Bronchitis, acute	33	22	10	...	...	...	32	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	18
91. Bronchitis, chronic	25	...	...	1	...	2	2	1	...	...	...	...	...	1	1	1	1	2	2	...	7	1	3	1	3	...	15	10
92. Broncho pneumonia	94	38	8	7	6	...	59	...	...	1	1	1	2	...	1	2	3	3	5	8	5	1	6	1	1	...	52	42
93. Pneumonia	128	10	11	3	3	2	29	2	...	2	4	5	9	13	8	4	9	11	8	5	6	6	3	3	1	...	74	54
94. Pleurisy	6	1	1	...	1	...	3	1	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	6	...
95. Pulmonary congestion and apoplexy	4	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	1	...	...	4	...	
96. Gangrene of the lung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
97. Asthma	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	1	...	...	1	2
98. Emphysema, pulmonary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
99. Other diseases of the respiratory apparatus (phthisis excepted)	3	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	2	1	
Total respiratory apparatus	302	71	30	12	11	3	127	6	0	4	5	8	12	15	11	7	14	18	15	17	13	11	10	8	1	172	130	

CAUSES OF DEATH

[illegible]

CAUSES OF DEATH

Total for 1917

AGE

SEX

Diseases of the Digestive Apparatus—Continued	Total		AGE														SEX										
	Under 1 year	1 year and under 2	2 years and under 3	3 years and under 4	4 years and under 5	Total under 5 years	5 years and under 10	10 years and under 15	15 years and under 20	20 years and under 25	25 years and under 30	30 years and under 35	35 years and under 40	40 years and under 45	45 years and under 50	50 years and under 55	55 years and under 60	60 years and under 65	65 years and under 70	70 years and under 75	75 years and under 80	80 years and under 85	85 years and under 90	90 years and over	Males	Females	
112. Cirrhosis of the liver....	10	...	...	...	...	...	...	...	...	...	...	...	2	...	6	1	...	1	...	...	...	...	...	...	...	7	3
113. Biliary calculi	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
114. Other affections of the liver	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	1	...	1	...	...	...	1	4
115. Affections of the spleen...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	1
116. Peritonitis, simple (peral excepted)	20	...	1	...	...	2	1	3	1	3	1	3	1	3	1	1	...	...	...	...	...	...	...	...	...	11	9
117. Other affections of the digestive apparatus (cancer and tubercle excepted) ..	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2
118. Appendicitis and abscess of the iliac fossæ.....	11	...	1	...	...	1	1	4	1	...	...	...	1	2	1	...	...	...	...	...	...	...	...	...	...	4	7
Total digestive apparatus	282	171	19	10	2	204	3	9	2	4	1	4	6	9	10	9	3	7	4	3	4	...	...	...	...	156	126
VI. Diseases of the Genito-Urinary Apparatus and its Adnexa																											
119. Nephritis, acute	10	...	...	...	...	...	...	...	...	2	...	2	1	2	...	...	...	1	...	1	...	...	1	...	...	6	4
120. Bright's disease	107	...	...	...	...	...	...	1	3	1	2	2	7	19	7	18	12	11	6	6	4	5	2	1	...	58	49
121. Other diseases of the kidneys and their adnexa...	4	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	1	1	...	...	...	...	4	...

CAUSES OF DEATH	AGE																								SEX	
																									Males	Females
	Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over		
Diseases of the Genito-Urinary Apparatus and its Adnexa—Continued																										
122. Calculi of the urinary tract																										
123. Diseases of the bladder...												1		1											1	
124. Diseases of the urethra, urinary abscess, etc....																									1	
125. Diseases of the prostate...																										
126. Non-venereal diseases of the male genital organs...																										
127. Metritis																										
128. Hemorrhage, uterine, non-puerperal																										
129. Tumor, uterine, non-cancerous	1													1											1	
130. Other diseases of the uterus																										
131. Cysts and other tumors of the ovary																										
132. Other diseases of the female genital organs.....	2										1															
Total for 1917																										

CAUSES OF DEATH

Total for 1917

AGE

SEX

Females

Males

90 years and over

85 years and under 90 years

80 years and under 85 years

75 years and under 80 years

70 years and under 75 years

65 years and under 70 years

60 years and under 65 years

55 years and under 60 years

50 years and under 55 years

45 years and under 50 years

40 years and under 45 years

35 years and under 40 years

30 years and under 35 years

25 years and under 30 years

20 years and under 25 years

15 years and under 20 years

10 years and under 15 years

5 years and under 10 years

Total under 5 years

4 years and under 5 years

3 years and under 4 years

2 years and under 3 years

1 year and under 2 years

Under 1 year

Diseases of the Genito-Urinary Apparatus and its Adnexa—Continued

133. Diseases of the breast, non-puerperal (cancer excepted)

Total of genito-urinary

VII. Puerperal State.

134. Accidents of pregnancy

135. Hemorrhage, puerperal ..

136. Other accidents of labor ..

137. Septicemia, puerperal ...

138. Albuminuria and puerperal eclampsia

139. Phlegmasia alba dolens, puerperal

140. Other puerperal accidents—sudden death

141. Puerperal diseases of the breast

Total puerperal

[illegible]

CAUSES OF DEATH	AGE																				SEX				
																					Males	Females			
	Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over	
Affections Produced by External Causes—Continued																									
174. Absorption of deleterious gases (suicide excepted).	6	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
175. Other acute poisonings...	5	1	1	1	1	5	1	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	2
176. Other external violence and *Homicide	3	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total affections, etc...	113	5	3	6	2	18	10	4	3	4	7	5	8	10	9	8	11	3	4	2	2	3	2	0	83
XIV. Ill-defined Diseases																									30
177. Dropsy	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
178. Sudden death	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
179. Non-specified or ill-defined causes of death.....	16	10	1	1	1	12	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	7
Total ill-defined dis-cases	16	10	1	1	1	12	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	7
Total from all causes	1938	459	73	47	30	12 621	44	29	29	57	48	64	87	102	101	113	113	138	103	104	85	51	35	14	1001

COLLECTION OF ASHES, 1917.

January	3,402	loads
February	2,665	“
March	3,081	“
April	3,186	“
May	2,728	“
June	1,927	“
July	1,973	“
August	2,179	“
September	2,033	“
October	2,501	“
November	2,865	“
December	2,939	“
	<hr/>	
	31,479	“

COLLECTION OF SWILL, 1917.

January	397½	loads
February	307½	“
March	309	“
April	275	“
May	296	“
June	302	“
July	327½	“
August	409½	“
September	444½	“
October	360	“
November	290	“
December	315	“
	<hr/>	
	4,033½	“

544 loads of Paper were collected in 1917.

603 loads of Market Refuse were collected in 1917.

SWILL ACCOUNT, 1917.

January	\$421.92
February	323.14
March	320.67
April	293.80
May	316.32
June	321.30
July	354.40
August	445.66
September	496.90
October	375.65
November	284.37
December	312.52
Swill Licenses	540.00

\$1,806.65

620½ loads of Swill were charged to the City Farm.

103 Swill Licenses were issued during the year.

FINANCIAL STATEMENT—EXPENDITURES.

PAY ROLLS—OFFICE.

January	\$ 866.00
February	854.00
March	1,067.50
April	876.00
May	876.00
June	1,110.00
July	876.00
August	903.76
September	1,110.00
October	876.00
November	876.00
December	1,160.65

\$11,451.91

PAY ROLLS—YARD.

January	\$4,197.59
February	4,200.76
March	5,251.04
April	4,553.41
May	4,449.40
June	5,204.91
July	4,161.92
August	4,053.17
September	5,250.68
October	4,172.54
November	4,065.78
December	6,198.20
	<hr/>
	\$55,759.40

ANALYSIS OF OFFICE AND YARD
PAY ROLLS OF 1917.

OFFICE.

Agent	\$1,830.00
Fumigator	1,079.50
Tenement House Inspector.....	1,356.33
Tuberculosis Physician	260.00
Plumbing Inspector	1,291.16
Looking Up Special Settlement Cases.....	78.00
Meat Inspector	939.00
Vaccinating Physician	313.00
Health Inspector	1,134.66
Contagion Inspector	1,464.00
Tuberculosis Nurse	782.50
Registrar	842.00
Substitute Nurse	30.00
Wages During Quarantine.....	51.76
Board of Health (3 members).....	1,500.00
Bacteriologist	1,000.00
	<hr/>
	\$13,951.91

YARD.

Ashes	\$26,552.68
Swill	12,106.60
Dumps and Alleys.....	5,545.61
Stablemen	2,992.13
Foreman	1,427.25
Blacksmiths	2,195.78
Market Refuse	2,760.35
Yardman	1,072.25
Wheelwright	1,072.25
Cleaning Harnesses	34.50
	<hr/>
	\$55,759.40

ANALYSIS OF BILLS, 1917.

OFFICE SUNDRIES.

Books	\$ 36.50	
Bacteriological Laboratory	324.80	
Car Tickets	312.00	
Express	28.46	
Fumigating Supplies	191.47	
Investigating Death Returns and Vaccinating....	118.00	
Printed Supplies	227.50	
Printing Annual Report.....	98.60	
Stamps and Stamped Envelopes.....	190.32	
Sundries	172.18	
Trip Books	45.00	
Telephone	16.24	
Travelling Expenses	18.96	
Use of Auto.....	156.00	
Plumbing and Electrical Work.....	4.20	
	<hr/>	1,940.23
Boston, City of.....	30.00	
Food and Clothing Destroyed.....	16.57	
Lowell Hospital	573.23	
Medicine	27.20	
Medical Services	257.00	
Provisions	31.44	
St. John's Hospital.....	195.00	
Test Tubes	48.00	
Rent	15.00	

Services of Nurse.....	2.00	
Tongue Depressors	7.50	
Expenditures for Contagious Diseases (excepting Tuberculosis) according to Chapter 386 Acts of 1907		1,202.94
Cambridge, City of.....	89.58	
Book	12.00	
Chelmsford Street Hospital.....	635.65	
Clinton, Town of.....	282.58	
Consumptives Hospital, Mattapan.....	285.00	
Clothing	23.88	
Channing Home, Boston.....	35.00	
Clinic Supplies	9.70	
Lawrence Tuberculosis Hospital.....	1,368.68	
Lakeville State Sanatorium.....	592.94	
Medicine	135.75	
Medical Services	48.00	
Provisions	1,331.87	
Sputum Holders and Bottles.....	175.05	
Tewksbury State Infirmary.....	550.00	
Transportation and Travelling Expenses.....	120.74	
Nurse at Clinic.....	6.00	
Rutland State Sanatorium.....	859.08	
Mattresses Destroyed	21.50	
Burial	6.00	
Lynn Tuberculosis Hospital.....	144.00	
Dentistry	5.50	
No. Reading Sanatorium.....	2,290.89	
Mass. Hospital School, Canton.....	8.00	
No. Reading State Sanatorium.....	1,455.39	
Expenditures for Tuberculosis.....		10,492.78
Total Office Sundries.....		\$13,635.95

YARD SUNDRIES.

Ash Cart Covers.....	\$ 96.00
Blacksmiths' Supplies	1,508.65
Coal	106.17
Clipping Horses	3.25
Corn and Meal.....	487.44
Canvas Covers	60.00
Disinfectant	10.90
Express .....	.68
Electric Light and Electrical Work.....	130.32
Flag	6.50
Gas	75.65
Hardware	173.86
Horses	785.00
Harnesses and Repairing and Supplies...	542.63
Hay	5,045.28
Laundry	262.50
Lumber	152.55
Printed Supplies	15.00
Repairing	5.34
Repairing Ambulances and Wagons.....	47.20
Rock Salt	23.87
Sundries	60.97
Straw	300.64
Telephone	8.13
Umbrella	5.00
Use of Horses.....	1,251.50
Veterinary Services	60.75
Water	152.39
Oats	5,449.53
<hr/>	
Total Yard Sundries.....	\$16,827.70

MILK DEPARTMENT.

SALARIES.

Milk Inspector	\$1,516.70
Collector of Samples.....	903.08
<hr/>	
	\$2,419.78

MILK DEPARTMENT SUNDRIES.

Advertising	\$ 1.96
Books	30.50
Dessicator	13.00
Express	6.41
Electrical Work	1.88
Automatic Still	55.00
Glassware	115.54
Microscope	139.00
Filter Paper	14.52
Martindale Counting Apparatus.....	25.00
Motor Hire	22.92
Printed Supplies	48.00
Sundries	39.38
Testing Babcock Machines and Glassware.	7.85
Travelling Expenses	144.59
Telephone	63.31
Stamps and Registered Letters.....	73.47
Wall Map	5.00
Thermometer	4.50
Typewriter	110.00
Mineral Oil .....	.70
Vitriol Oil	5.83
Slide Rule	4.09

Total Milk Department Sundries..... \$932.45

Total Milk Department Expenditures \$3,352.23

INCOME TRANSFERRED TO GENERAL FUND,
1917.

HEALTH DEPARTMENT.

Swill Sold	\$4,266.65	
Swill Licenses	540.00	
		<hr/>
		\$4,806.65
James E. Day (old junk).....		19.18
R. J. Martin (sale of manure).....		112.75
Louis Vallas (sale of manure).....		201.00
Arlington, Town of.....		192.70

Commonwealth of Massachusetts.....	1,564.97
Fall River, City of.....	22.01
Worcester, City of.....	6.00
Westford, Town of.....	124.50
	<hr/>
	\$7,049.76

MILK DEPARTMENT.

Milk and Oleomargarine Licenses.....	\$329.50
--------------------------------------	----------

COST OF HEALTH DEPARTMENT, 1917.

EXPENDITURES.

Salaries of Board.....	\$ 1,500.00
Salary of Bacteriologist.....	1,000.00
Pay Rolls, Office.....	11,451.91
Bills, Office	13,635.95
Yard Labor	55,759.40
Yard Sundries	16,827.70
Milk Department Salaries.....	2,419.78
Milk Department Sundries.....	932.45
Medical Inspection Private Schools.....	800.00
	<hr/>
	\$104,327.19

APPROPRIATIONS.

Office	\$ 27,935.00
Yard	71,100.00
Milk Department	4,000.00
Medical Inspection Private Schools.....	800.00
	<hr/>
	\$103,835.00
Department Transfers	1,275.64
Receipts	10.50
	<hr/>
	\$105,121.14
Deduction from Appropriation.....	500.00
	<hr/>
	\$104,621.14
Deficit	353.82
	<hr/>
	\$104,974.96
On hand Dec. 31, 1918.....	647.77
	<hr/>
	\$104,327.19

SUMMARY, 1917.

	Appropriation from Revenue	Department Transfers	Receipts	Deduction from Appropriation	Total Expenditures	Deficit	Balance on Hand
HEALTH OFFICE							
Salaries:					\$		
Board					1,500.00		
Bacteriologist					1,000.00		
Pay Rolls					11,451.91		
Sundries					13,635.95		
					<hr/>		
	\$ 27,935.00		\$10.50	\$500.00	27,587.86	\$142.36	
HEALTH YARD							
Labor					55,759.40		
Sundries					16,827.70		
					<hr/>		
	71,100.00	\$1,275.64			72,587.10	211.46	
MILK DEPARTMENT							
Salaries					2,419.78		
Sundries					932.45		
					<hr/>		
	4,000.00				3,352.23		\$647.77
MEDICAL INSPECTION PRIVATE SCHOOLS							
					800.00		
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	\$103,835.00	\$1,275.64	\$10.50	\$500.00	\$104,327.19	\$353.82	\$647.77

Year	Popula- tion	Expenditures	Revenue	Net Cost	City's Valuation	Taxation per Capita
1894	83,026	\$a57,073.73	\$ 318.43	\$56,755.03	\$69,091,536	.63
1895	84,359	46,324.04	570.80	45,753.24	68,885,732	.54
1896	85,700	45,587.11	265.57	45,321.54	69,910,472	.53
1897	87,000	48,551.84	2,369.99	46,181.85	70,389,280	.53
1898	87,000	41,026.78	3,229.02	37,779.76	70,977,303	.43
1899	90,114	40,830.23	3,796.05	37,034.18	71,255,587	.41
1900	94,969	b46,266.11	3,647.03	42,619.00	71,529,515	.44
1901	94,969	46,673.41	4,585.26	42,088.15	71,674,588	.44
1902	95,574	c54,815.33	6,103.87	48,711.46	71,903,757	.48
1903	101,959	d46,168.01	4,085.12	42,682.89	72,004,028	.41
1904	104,402	e46,451.97	4,137.31	42,314.66	71,614,907	.40
1905	94,889	f51,707.39	3,727.41	47,979.98	71,645,718	.50
1906	96,380	54,096.00	4,566.66	49,529.34	74,325,775	.51
1907	96,380	57,763.79	6,808.20	50,955.59	76,079,750	.53
1908	96,380	g57,342.61	6,418.50	50,924.11	77,858,891	.53
1909	96,380	56,346.33	6,763.73	h49,582.60	79,176,837	.51
1910	106,294	h65,911.31	h6,770.56	h59,140.75	80,094,803	.56
1911	106,294	i73,425.97	i6,762.36	i66,663.61	82,166,743	.62
1912	106,294	j74,136.25	j7,031.59	j67,104.66	84,797,348	.63
1913	106,294	k91,635.29	7,042.53	84,592.76	87,277,643	.80
1914	106,294	182,448.34	8,040.56	74,407.78	89,294,001	.70
1915	106,294	m88,841.59	6,492.16	82,349.43	92,716,047	.77
1916	107,978	n94,305.92	7,112.16	87,193.76	94,503,423	.80
1917	107,978	o104,327.19	7,379.26	96,947.93	90,820,901	.90
a.	Smallpox and Swill Cremation, \$12,708.25.					
b.	Smallpox, \$4,739.67					
c.	Smallpox, 6,626.20					
d.	Smallpox, 1,000.00					
e.	Smallpox, 1,010.02					
f.	Smallpox, 3,297.08					
g.	Smallpox, 291.64					
h.	This includes expenditures and revenue of Milk Dept.					
i.	"	"	"	"	"	"
j.	"	"	"	"	"	also Smallpox.
k.	"	"	"	"	"	"
l.	"	"	"	"	"	"
m.	"	"	"	"	"	"
n.	"	"	"	"	"	"
o.	"	"	"	"	"	"

INDEX

Organization	3
Report	5
Inspector of Milk.....	6
Report of Bacteriologist.....	8
Report of Examining Physician at Tuberculosis Clinic.....	11
Report of Health Department Nurse.....	13
Report of Inspector of Meats and Provisions.....	14
Report of Plumbing Inspector.....	15
Report of Tenement House Inspector.....	16
Report of Fumigator.....	17
Medical Inspection of Private Schools, 1917.....	17
Cases of Contagious Diseases Reported.....	18
Deaths from Contagious Diseases.....	18
Cases of Diphtheria Reported to the Board of Health, 1917.....	19
Mortality of Diphtheria.....	20
Scarlet Fever	21
Measles	21
Infantile Paralysis	22
Cerebro-Spinal Meningitis	22
Tuberculosis	23
Typhoid Fever	23
Typhoid Fever, 1890-1917.....	24
Vital Statistics	24
Birthplace	25
Places of Interment.....	25
Places of Death.....	25
Death Rate	26
Mortality Report for 1917.....	27
Collection of Ashes.....	44
Collection of Swill.....	44
Swill Account, 1917.....	45
Financial Statement—Expenditures	45
Pay Rolls—Yard	56
Analysis of Office and Yard Pay Rolls, 1917.....	46
Yard	47
Analysis of Bills, 1917.....	47
Office Sundries	47
Yard Sundries	49
Milk Department, 1917.....	49
Milk Department Sundries.....	50
Income Transferred to General Fund, 1917.....	50
Cost of Health Department, 1917.....	51
Summary, 1917	52

SIXTH ANNUAL REPORT
OF
FIRE COMMISSIONER
OF THE FIRE DEPARTMENT
CITY OF LOWELL



FOR THE YEAR
NINETEEN HUNDRED AND SEVENTEEN

REPORT

LOWELL, MASS., January 1, 1918.

TO THE MUNICIPAL COUNCIL OF THE CITY OF
LOWELL:

GENTLEMEN:—I herewith submit the sixth annual report of the Commissioner of the Fire Department for the year ending December 31st, 1917.

The following statement will show the receipts and expenditures for the year:

RECEIPTS

Appropriation	\$218,000.00
Transfers and cash receipts	3,603.01
	<hr/> \$221,603.01

EXPENDITURES

Fire alarm	\$ 2,092.89
Automobiles and repairs of same ..	10,403.41
Chemicals	340.80
Coal and wood	4,112.88
Furniture and bedding	432.41
Hose	2,333.00
Freight and express	57.59
Harness repairs	178.30
Hay and grain	8,379.08
Horse hire	29.00
Laundry	854.61

Lighting	1,820.43
Printing and stationery	320.93
Repairs	217.34
Shoeing	1,107.52
Soap	252.65
Sundries	3,324.34
Telephone	384.65
Veterinary	90.00
Wagon repairs	167.85
Water bills	747.54
	<hr/>
	\$ 37,647.22
Salaries and wages	182,322.65
	<hr/>
	\$219,969.87
	<hr/>
Balance	\$ 1,633.14

The balance of \$1,633.14 will be carried over to 1918 to pay for coal contracted for in 1917, but not delivered.

SPECIAL APPROPRIATIONS

FIRE ALARM BOXES

Appropriated	\$875.00
Expended	875.00

REPAIRING LADDER TRUCK

Appropriated	\$678.00
Expended	678.00

TRIPLE COMBINATION

Appropriated	\$6,000.00
--------------------	------------

A White triple combination was contracted for and will be delivered early in 1918.

Details of the general work of the department will be found in the Chief's report which follows.

Respectfully submitted,

GEORGE H. BROWN,

Commissioner of Fire Department.

CHIEF'S REPORT

Chief's Office, Central Fire Station,

Lowell, January 1, 1918.

To the Commissioner of Water Works and Fire Protection of
the City of Lowell.

Dear Sir:

In compliance with the City ordinance, I have the honor of submitting for your consideration the annual report of the condition and operation of the Fire Department for the year ending December 31st, 1917.

Salaries of Members of The Fire Department.

Chief Engineer	\$2,500.00	per annum
1st Assistant Chief	5.28	per day
2nd Assistant Chief	4.80	per day
Assistant Engineer	450.00	per annum
Call Men	250.00	per annum
Permanent Men	3.30	per day
Captains of Companies (Permanent)	3.69	per day
Lieutenants of Companies (Permanent) ..	3.58	per day
Engineers of Steamer (Permanent)	3.58	per day
Electrician	29.43	per week
Lineman	23.93	per week
Linemen	23.10	per week

FORCE

The Department is divided into two classes, Permanent and Call. The Permanent force consists of:

1 Chief Engineer	1 Chauffeur
2 District Chiefs	13 Drivers
1 Inspector of Repairs	74 Hosemen

1 Fire Inspector	27 Laddermen
1 Fire Alarm Operator	4 Engineers of Steamers
3 Linemen	8 Patrolmen
3 Telephone Operators	

A total of 139, of which 17 are Captains and 28 Lieutenants. The Call force consists of:

1 Assistant Engineer	15 Hosemen
7 Laddermen	

A total of 23.

There are also 10 permanent men in reserve who have not been assigned.

This makes a total of 172, divided into companies as follows:

- 6 Steam Fire Engine Companies.
- 6 Horse Hose Companies, 1 with Chemical Engine attached.
- 4 Hook and Ladder Companies, 1 with Chemical Engine attached.
- 1 Protective Company.

CHANGES DURING THE YEAR

Appointed permanent	1
Appointed permanent from call force	4
Appointed permanent (lineman)	1
Died	5
Pensioned	2
Promoted	20
Resigned from call force	1

APPARATUS

The apparatus of this department is kept in the best possible condition and consists at present of

Chief's Automobile	1
Assistant Chiefs' Automobiles	2
Electrician's Automobile	1
Combination Motors, Chemical and Hose Wagons..	5
Triple Combination	1
Auto Patrol Wagon	1
Service Car	1
Steam Fire Engines	5
Tow Horse Hose Wagons	6

Ladder Trucks	4
Chemical Engines	2
Hale Water Tower	1
Fuel Wagons	8
Hose Pungs	3
Fire Extinguishers	30

RESERVE APPARATUS

Electrician's Wagon	1
Electrician's Sleigh	1
Inspector of Repairs' Wagon	1
Two Horse Hose Wagons	3
Ladder Truck	1

HORSES

There are at the present time in the service of the department forty-three horses.

HARNESS

The harness in use in the department at the present time consists as follows:

Sets of single swinging harness	2
Sets of double swinging harness	10
Sets of three horse swinging harness	7

TELEPHONE

The telephone system is the same that was installed in 1913, consisting of one thirty line switchboard located at the Palmer Street Station, which is connected with the central office of the New England Telephone and Telegraph Company by two toll lines, and also the seventeen different fire stations, the Chief's office and residence, the two District Chiefs' residences and battery room with eleven local lines.

PROTECTIVE DEPARTMENT

This department is maintained by the City and consists of eight permanent men. They have responded to three hundred and four alarms; in service one hundred and thirty-nine and three-quarters hours; spread one hundred and thirty-four covers; used one hundred and seventy-six extinguishers and forty-seven tanks; raised three hundred feet of ladders; one hundred and seventeen hours inspection duty; traveled four hundred and eighty-eight miles.

FIRE PREVENTION

A systematic inspection of buildings is made by the members of the Fire Department in order to relieve the fire hazard of the City. Each company has a certain district to inspect, and each inspection is recorded on a printed slip with report of conditions found. These slips are turned over to the Chief of the Department, and, when the conditions found are considered dangerous, letters are sent to both owners and tenants to have said conditions remedied. 14,837 buildings were inspected during the year by the different companies.

FIRES AND LOSSES

The whole number of alarms during the year ending December 31st, 1917 was one thousand and thirty-one (1031). Two hundred and fifty-one (251) were given from signal boxes; three hundred and seventy-two (372) telephones; two hundred and eleven (211) stills; fifteen (15) automatics; ten (10) exposures; and one hundred and seventy-two (172) reported fires. The "No School" signal was given ten (10) times. There were four hundred and thirty-nine (439) fires extinguished by chemicals alone and one hundred and thirty-seven (137) where water was used. The remaining number were extinguished by other means or had been put out before the arrival of the department. Eighty-five (85) were in brick or stone buildings; three hundred and seventy-six (376) in frame buildings, and three hundred and ninety-eight (398) other than building fires. The reported fires were mostly in frame buildings.

The whole amount of loss, except the reported fires, was one hundred and thirty-nine thousand, two hundred and sixty-six dollars and forty-four cents (\$139,266.44). Insurance, three million forty-five thousand, three hundred and sixty-seven dollars and twelve cents (\$3,045,367.12); insurance paid, one hundred and twenty-four thousand, two hundred and seventy-one dollars and seventy-one cents (\$124,271.71). Loss above insurance, fourteen thousand nine hundred and ninety-four dollars and seventy-three cents (\$14,994.73). Valuation, three million seventy-three thousand, seven hundred and eighty-five dollars and sixty-two cents (\$3,073,785.62). The reported loss was four thousand, nine hundred and thirty-five dollars and thirty-nine cents (\$4,935.39); insurance, two million three hundred and fifteen thousand, four hundred and fifty-one dollars

and twenty-six cents (\$2,315,451.26); valuation, two million three hundred and thirty-seven thousand, forty-four dollars (\$2,337,044.00).

There have been eleven (11) alarms out of the City, to which some part of the department has responded, for which no insurances are kept; Dracut 10, Tyngsboro 1.

There have been eighteen (18) fires where the loss was \$1,000.00 and over.

January 5th, 34 Central St. owned by J. K. Fellows Heirs and occupied by several, loss \$5,015.74.

January 12th, 806 Bridge St. owned by Tilton Seminary and occupied by M. G. Gooch, loss \$2,277.65.

January 16th, 106 Middlesex St. owned by Lowell Co-operative Association and occupied by Lowell Co-operative Association and others, loss \$3,742.75.

January 19th, 156 Methuen St. owned by F. S. Coolidge and occupied by P. A. Leavitt, loss \$2,050.00.

February 12th, 91 Chelmsford St. owned by N. A. Carp and occupied by several, loss \$1,762.46.

March 22nd, Clark St. owned and occupied by the City as Vocational School, loss \$14,515.15.

April 10th, 243-5 Central St. owned by T. F. Hennessey and occupied by several, loss \$6,759.58.

May 25th, 209 Summer St. owned and occupied by W. H. Williams, loss \$2,225.00.

August 10th, 554-60 Middlesex St. owned by S. Rostler and occupied by several, loss \$2,048.36.

September 13th, Plain St. owned and occupied by the Water Department, loss \$2,167.59.

September 22nd, Warrentown, owned by Edward Cawley and occupied by the Northern Waste Company, loss \$52,389.00.

October 3rd, 231 Dutton St. owned by H. Levy and occupied by several, loss \$1,245.00.

October 20th, 25 Fletcher St. owned and occupied by T. J. McDonald & Co., loss \$6,821.43.

October 24th, 175 Middlesex St. owned by W. B. Spalding Est. and occupied by the Union Market, loss \$1,142.80.

November 1st, Warren St. owned by Middlesex Co. and occupied by several, loss \$1,583.38.

November 6th, 11 Broughton Ave. owned by M. Shamus and occupied by several, loss \$4,240.00.

November 27th, 19 Merrimack St. owned by F. Ladd Est. and occupied by the Cloverdale Co., loss \$6,371.74.

December 9th, 166 Fairmount St. owned by A. C. Taylor and occupied by T. Nesmith, Jr., loss \$3,975.00.

The total loss on these eighteen (18) fires was one hundred and twenty thousand, three hundred and thirty-two dollars and sixty-three cents (\$120,332.63), leaving twenty-three thousand, eight hundred and sixty-nine dollars and twenty cents (\$23,869.20) to be divided between the other eight hundred and forty-one (841) alarms.

A comparison of the Total Number of Alarms and Losses from January, 1902 to January, 1918:

Year	Alarms	Ins. Loss	Unins. Loss	Total Loss
1902	413	\$108,475.64	\$ 2,367.42	\$110,843.06
1903	446	223,585.02	6,653.86	230,238.88
1904	707	326,861.57	90,464.27	417,325.84
1905	798	89,112.18	1,850.00	90,962.18
1906	557	64,994.94	2,270.71	67,265.65
1907	838	242,167.98	39,624.52	281,792.50
1908	935	350,873.25	16,421.80	367,295.05
1909	963	177,759.11	8,705.80	186,464.91
1910	904	64,781.93	3,188.00	67,969.93
1911	1101	86,034.34	19,295.48	105,329.82
1912	959	260,833.26	9,575.99	270,409.25
1913	882	200,600.03	19,825.26	220,425.29
1914	1028	265,804.53	17,476.53	283,281.06
1915	926	170,262.53	12,127.67	182,390.20
1916	896	138,170.66	3,400.86	141,571.52
1917	1031	129,207.10	14,994.73	144,201.83

TOTAL NUMBER OF BUILDINGS IN THE CITY

Wooden buildings	19,220
Brick buildings	1,061
Stone buildings	82
Cement buildings	160
Wood and glass buildings	45
Wood buildings covered with metal	13
Steel buildings	12
Iron buildings	9
Concrete buildings	3

Buildings of all descriptions	20,605
An increase during the past year of	260

NUMBER OF ALARMS OF FIRE EACH MONTH

January	72	August	60
February	53	September	47
March	70	October	64
April	142	November	118
May	63	December	76
June	36	Reported	172
July	58		
Total			1,031

CAUSES OF FIRES AND ALARMS

Alarms for same fire	25	False alarms	17
Ash barrel	1	Fat on stove	6
Automobiles	22	Filling tank	1
Awning	2	Fire crackers	5
Bon fire	1	Food burning	2
Brush	11	Fumigating	1
Burning leaves	2	Gas jet	7
Carelessness	8	Gas stove	3
Careless use of matches...	28	Grass	161
Children and matches	23	Hot coals set lumber	1
Chimney	86	Hot ashes	19
Cigarette	20	Hot iron	1
Clothes caught fire	2	Kerosene can	2
Combustion	43	Lamp exploded	1
Defective chimney	13	Lamp set curtain	1
Defective funnel	3	Lamp upset	6
Drying plaster	7	Lantern set ceiling	1
Dump	95	Lightning	7
Electric car	6	Meat burning	2
Electric light pole	4	Melting pot set woodwork	1
Electric wires	4	Motor on elevator	1
Explosion	1	No school	10
Exposure	10	Overheated boiler	9

Overheated flue	1	Sparks set roof	15
Overheated picker	1	Sparks set railroad ties ..	2
Overheated stove	6	Sparks set sleeper	1
Oil kettle	1	Smoking	28
Oil stove	8	Steam escaping	4
Oil tank	1	Stove set partition	2
Out of the city	11	Stove smoking	9
Railroad ties	2	Thawing post in road....	1
Rats and matches	6	Thawing shavings and	
Rekindled	12	gravel	2
Reported alarms	172	Thawing water pipes	11
Rescue man in canal	1	Thermostat system out of	
Rubbish	38	order	9
Second alarm	3	Tree	2
Sparks from locomotive..	2	Vulcanizer	2
Sparks in chute	1	Water front exploded	2
Sparks set freight car	2	Water pipe burst	2
Sparks set lumber	1	Wires crossed	1
Sparks from stove	3	Wires set tree	1

272

94

272

94

417

265

1048

41

1007

SERVICE OF THE DEPARTMENT FOR 1917

	Number of alarms attended	Number of hours worked	Feet of hose laid	Hours of hydrants in use	Number of extinguishers used	Number of chemical tanks used	Feet of ladders raised	Hours of engines worked	Number of covers used
Engine	125	112½	7,750	28¾	56	12	188		
"	221	147¾	11,400	27¾	94	27	340	1½	
"	152	98½	8,250	16¾	41	26	510	3½	
"	221	146	8,600	25	75	13	156	2½	
"	137	175¾	20,400	83¾	83		112	1½	
"	156	114	5,450	21¾	50			2	
Hose	115	92¾	6,750	20¾	44				
"	203	121	9,650	26¼	62	27	184		
"	110	109½	8,900	32¼	70				
"	107	90½	5,400	13½	98	11	524		
"	93	80¾	5,350	18¾	52				
"	166	176¼	13,650	87	28	14	200		
Truck	65	52¾					793		
"	107	88¾			11	15	969		
"	140	82¾					3,018		
"	106	65¾					1,976		
Protective	304	139¾			116	47	300		134
	2,528	1,901½	113,450	411¾	830	192	9,220	11	134

NUMBER OF ALARMS ANSWERED BY MEMBERS OF THE DEPARTMENT ON DAYS OFF

Capt. C. E. Abare	1	C. H. Cogswell	2
Capt. E. W. Bartlett	5	M. I. Collins	1
Capt. J. E. Burns	1	J. F. Convery	2
Capt. R. E. Burns	1	G. A. Crawford	1
Capt. B. J. Dunn	4	W. F. Egan	2
Capt. G. F. Flint	2	J. D. Finnegan	3
Capt. W. H. Halstead	12	J. E. Fontaine	2
Capt. H. A. Merrill	6	W. T. Foss	2
Capt. T. F. Saunders	10	H. V. Green	1
Capt. J. A. Shea	1	R. J. Hayes	2
Lieut. W. M. Barrett	2	W. J. Heelon	1
Lieut. G. A. Campbell	1	J. E. Jantzen	4
Lieut. T. W. Collins	1	D. Laferriere	2
Lieut. Timothy Dwyer	1	J. H. Lannon	2
Lieut. H. L. Foster	4	J. J. Malone	1
Lieut. J. W. Halstead	3	C. J. Meehan	2
Lieut. H. F. Harris	5	P. J. Mooney	1
Lieut. W. S. Holt	1	J. J. Murphy	1
Lieut. Edward Jennings . . .	1	M. J. O'Connor	1
Lieut. W. J. Lambert	1	J. J. O'Neill	1
Lieut. P. F. Mahoney	4	S. R. Pendexter	5
Lieut. J. J. McCafferty . . .	1	B. C. Reed	1
Lieut. L. P. Reed	1	C. A. Rock	1
J. F. Ambrose	1	J. H. Rogers	1
W. H. Bamford	1	B. M. Simpson	2
J. Bernier	1	F. O. J. Townsend	3
R. W. Broadbent	10	G. A. Schofield	14
C. L. Brown	3	G. J. Tracy	1
R. Carland	1	F. E. Turner	2

IN MEMORIAM

FREDERICK E. FULLER

CAPTAIN

Truck Company No. 3

Appointed May, 1869.

DIED

January 12, 1917.

BERNARD J. DUNN

CAPTAIN

Hose Company No. 8

Appointed February, 1890.

DIED

October 13, 1917.

CHARLES D. FOLEY

CAPTAIN

Engine Company No. 1

Appointed June, 1879.

DIED

December 2, 1917.

IN MEMORIAM

DANIEL W. RUSSELL
PATROLMAN

Protective Company No. 1

Appointed January, 1885.

DIED

January 22, 1917.

CHARLES L. CROWLEY
HOSEMAN

Engine Company No. 1.

Appointed May, 1905.

DIED

October 18, 1917.

FATALITIES

February 10. Roland Manseau, 173 Fletcher St., age eight years. Set clothing on fire while playing with matches.

February 28. Mrs. Jessie Clapperton, 17 Lilley Ave., age eighty years. Smoking in bed.

May 17. Raymond E. Leland, 27 Old Ferry Road, age two years. Playing with matches.

August 6. Rita Dumont, 75 Eugene St., age eleven months. Children playing with matches set baby's clothing.

October 18. Cornelius Kelleher, Perry St., Electric Light Company. Buried in hot coals.

October 26. Mrs. Dolly Randolph, 23 Pleasant St., age eighty-five years. Suffocated and burnt when department arrived.

October 30. Winnefred A. Dion, 6 Lane St. Ct., age seven years. Gas jet set bed. Child burnt to death.

November 3. Earnest Lavigne, 11 Salem St., age forty-two years. Smoking in bed.

November 6. Władysław Podgojne, 11 Broughton Ave., age five years. Suffocated and burnt.

November 6. Felka Mashouka, 11 Broughton Ave., age ten years. Suffocated and burnt.

November 6. Joseph Mashouka, 11 Broughton Ave., age twelve years. Suffocated and burnt.

November 6. Stanley Podgojne, 11 Broughton Ave., age forty years. Suffocated and burnt.

November 6. Jennie Podgojne, 11 Broughton Ave., age two months. Died November 8th. Badly burnt, was thrown from window.

December 31. Mary Kianka, 7 rear 219 Adams St., age twenty-two years. Putting kerosene in stove set clothing.

In conclusion I wish to extend my thanks to His Honor, the Mayor, the Commissioner of Water Works and Fire Protection and the Municipal Council for the interest taken in matters pertaining to the Fire Department. I also wish to thank the officers and members of the Department for the ability, faithfulness and willingness shown in the performance of their duties. I wish to extend thanks to the Chief of Police and the members of the Police Department for the assistance rendered at fires.

Respectfully submitted,

EDWARD F. SAUNDERS,

Chief of Fire Department.

FIRE DEPARTMENT.

January 1, 1918.

Commissioner.

GEORGE H. BROWN Office, City Hall
Residence, 445 Middlesex St.

Chief Engineer.

EDWARD F. SAUNDERS Office, Palmer St., Engine House
Residence, 24 Mt. Washington St.

District Chiefs.

JAMES C. SULLIVAN 250 Rogers St.
DANIEL H. CROWLEY 26 Marginal St.

Assistant Engineer.

CHARLES E. ALWAY 16 West Bowers St.

Chief's Chauffeur.

HARRY B. SANDERS 20 Manahan St.

Fire Alarm Operator.

HENRY C. FERNALD Palmer St. Engine House
THOMAS McCORMICK, Lineman 37 West Fifth St.
ARTHUR E. KING, Lineman 205 Stackpole St.
ROBERT G. RUTHERFORD, Lineman 34 Ware St.

Telephone Operators.

THOMAS F. CONWAY, Chief Operator 148 Sixth St.
JEREMIAH J. HARRINGTON 243 Stackpole St.
PHILIP McLAUGHLIN 16 Keene St.
GEORGE W. LOVETT 17 Olive St.

Inspector of Repairs.

THOMAS F. SAUNDERS 7 Varney St.

Fire Prevention Inspector.

EDWARD P. CUNNINGHAM 109 Mammoth Rd.

LIST OF MEMBERS, GIVING RANK AND RESIDENCE BY COMPANIES

ENGINE COMPANY NO. 1

795 Gorham Street

Thomas W. Collins, Lieutenant, Badge No. 11	145 Andrews St.
Philip F. Mooney, Lieutenant, Badge No. 18	203 Moore St.
James W. Jantzen, Engineer, Badge No. 16	3 Olive St.
Wm. J. Heelon, Driver, Badge No. 14	12 rear 33 So. Whipple St.
James O'Hare, Hoseman, Badge No. 13	27 Ellsworth St.
Robert H. Otley, Hoseman, Badge No. 12	17 Royal St.
W. Henry Kirkpatrick, Hoseman, Badge No. 10	35 London St.
Thomas McNamara, Call Man, Badge No. 17	Engine House
Peter Sheehan, Call Man, Badge No. 19	11 Lyon St.

ENGINE COMPANY NO. 2

45 Branch Street

Henry Boynton, Captain, Badge No. 2	17 Lane St.
Franklin B. Akers, Lieutenant, Badge No. 21	25 Waugh St.
Charles F. Stackpole, Lieutenant, Badge No. 22	25 Grace St.
Herman R. Morrison, Engineer, Badge No. 29	342 Westford St.
Wilbur H. Oke, Hoseman, Badge No. 20	175 Westford St.
Geo. A. Crawford, Hoseman, Badge No. 25	1073 Middlesex St.
Forest E. Alcott, Hoseman, Badge No. 28	416 Westford St.
James C. O'Neil, Asst. Engineer, Badge No. 24	20 Sixth Ave.
William P. Maker, Driver, Badge No. 26	12 Flemings St.

ENGINE COMPANY NO. 3

Palmer Cor. Middle Street

Frank Hoyt, Captain, Badge No. 30	21 Eighth Ave.
Elbridge H. Dearth, Lieutenant, Badge No. 31	64 So. Loring St.
Harold L. Foster, Lieutenant, Badge No. 36	31 Midland St.
Frank E. Turner, Hoseman, Badge No. 3	15 Ware St.
Moses I. Collins, Hoseman, Badge No. 33	20 Coral St.
Philip J. Connor, Hoseman, Badge No. 34	506 Gorham St.
John J. Rinehardt, Hoseman, Badge No. 38	101 Gates St.
George H. McDermott, Hoseman, Badge No. 39	171 Cross St.
Hugh V. Green, Hoseman, Badge No. 35	549 Lakeview Ave.

ENGINE COMPANY NO. 4

High Street

J. Edward Burns, Captain, Badge No. 4	39 Whitehead Ave.
Alfred F. Prescott, Lieutenant, Badge No. 42	565 Wilder St.
Joseph M. G. Burns, Lieutenant, Badge No. 47	543 Rogers St.
Charles L. Brown, Engineer, Badge No. 134	Engine House
William F. Dolan, Hoseman, Badge No. 43	Engine House
Patrick J. Mooney, Hoseman, Badge No. 45	158 Pleasant St.
James T. Doyle, Hoseman, Badge No. 49	Engine House
Francis J. Sullivan, Hoseman, Badge No. 44	151 Lawrence St.
George J. Tracy, Hoseman, Badge No. 88	30 Riverside St.
Michael E. Egan, Hoseman, Badge No. 48	113 Pleasant St.

ENGINE COMPANY NO. 5

29 Fourth Street

Charles F. Hemenway, Captain, Badge No. 53	101 Vernon St.
James J. McCafferty, Lieutenant, Badge No. 55	74 Fourth St.
Patrick F. Mahoney, Lieutenant, Badge No. 56	18 Fourth St.
Alonzo E. Kidder, Driver, Badge No. 5	61 Twelfth St.
Bird C. Reed, Driver, Badge No. 54	48 Humphrey St.
Jay D. Ismond, Engineer, Badge No. 51	246 Beacon St.
C. Herbert Cogswell, Hoseman, Badge No. 52	85 Whitney Ave.
Edson S. Barnes, Hoseman, Badge No. 50	68 Beacon St.
David Common, Call Man, Badge No. 57	109 Beech St.
Frederick D. Mansur, Call Man, Badge No. 58	21 Third St.
Arthur B. Strout, Call Man, Badge No. 59	101 Myrtle St.

ENGINE COMPANY NO. 6

Fletcher Street

Richard E. Burns, Captain, Badge No. 68	203 Westford St.
John J. Murphy, Lieutenant, Badge No. 64	239 School St.
Wm. J. Lambert, Lieutenant, Badge No. 65	963 Middlesex St.
John A. Fletcher, Hoseman, Badge No. 6	37 Varney St.
Frank G. Collins, Engineer, Badge No. 62	21 Gold St.
Thomas F. Maguire, Hoseman, Badge No. 63	14 Varney St.
Samuel R. Pendexter, Hoseman, Badge No. 60	22 W. Bowers St.
Edgar Perham, Hoseman, Badge No. 69	55 Arlington St.
John J. Wholey, Hoseman, Badge No. 66	48 Mt. Vernon St.
Edward A. Walsh, Call Man, Badge No. 67	19 Mt. Vernon St.

HOSE COMPANY NO. 7

490 Central Street

Orison A. Knapp, Captain, Badge No. 70	47 Hawthorn St.
Thomas H. Welch, Lieutenant, Badge No. 72	93 Chapel St.
Timothy J. Dewire, Driver, Badge No. 7	315 High St.
William J. Lane, Hoseman, Badge No. 74	505 Central St.
James H. Tracy, Hoseman, Badge No. 76	147 Concord St.
John J. O'Neill, Hoseman, Badge No. 75	56 North St.
Patrick Emerson, Call Man, Badge No. 73	6 Simpson Pl.

HOSE COMPANY NO. 8

Merrimack, Cor. Race Street

George F. Flint, Captain, Badge No. 82	63 Woodward Ave.
Gilman S. Alcott, Lieutenant, Badge No. 86	1194 Middlesex St.
Joseph F. Convery, Hoseman, Badge No. 83	19 Bowers St.
Joseph H. Rogers, Hoseman, Badge No. 89	209 Ludlam St.
Henry C. Carpentier, Hoseman, Badge No. 84	30 W. Meadow Rd.
James H. Gray, Hoseman, Badge No. 85	23 Ellsworth St.
Joseph L. Crowe, Hoseman, Badge No. 87	116 Crawford St.

HOSE COMPANY NO. 9

Lincoln Street

James A. Shea, Captain, Badge No. 90	22 Bleachery St.
George H. Chapman, Lieutenant, Badge No. 92	53 Quebec St.
Charles A. Rock, Hoseman, Badge No. 93	673 Chelmsford St.
Amherst S. Maynard, Hoseman, Badge No. 95	34 Branch St.
Fred Boynton, Hoseman, Badge No. 98	148 Smith St.
Frank A. Kappler, Call Man, Badge No. 94	125 London St.

HOSE COMPANY NO. 10

Mammoth Road

Edwin W. Bartlett, Captain, Badge No. 160	559 Fletcher St.
William F. Tighe, Lieutenant, Badge No. 162	28 Willie St.
Robert W. Broadbent, Hoseman, Badge No. 161	11 Fourth Ave
Roger J. Hayes, Hoseman, Badge No. 164	242 Mammoth Rd.
David Laferriere, Hoseman, Badge No. 167	21 W. Fifth Ave.
John J. Frazier, Call Man, Badge No. 163	54 Starbird St.
Edward F. Farrell, Call Man, Badge No. 166	12 Third Ave.
Thomas F. Welch, Call Man, Badge No. 165	30 Riverside St.
John J. McCarthy, Call Man, Badge No. 168	150 Fourth Ave.

HOSE COMPANY NO. 11

Lawrence Cor. So. Whipple St

William A. Dolan, Captain, Badge No. 200	56 Crowley St.
Edward Jennings, Lieutenant, Badge No. 201	859 Lawrence St.
John D. Finnegan, Driver, Badge No. 203	732 Lawrence St.
John N. Emerson, Hoseman, Badge No. 202	27 Carter St.
Michael J. O'Connor, Hoseman, Badge No. 204	101 London St.
John J. Donohoe, Hoseman, Badge No. 207	76 Agawam St.
Peter B. Gray, Call Man, Badge No. 208	71 Whipple St.
James E. Burns, Call Man, Badge No. 205	93 Moore St.
Frederick H. Crosby, Call Man, Badge No. 206	14 Whidden St.

HOSE COMPANY NO. 12

West Sixth Street

Charles E. Abare, Captain, Badge No. 220	51 Fifth St.
Wm. M. Barrett, Lieutenant, Badge No. 221	16 W. Bowers St.
Lewis P. Reed, Lieutenant, Badge No. 224	618 Beacon St.
Martin C. Rowell, Hoseman, Badge No. 222	87 Methuen St.
Joseph Bernier, Hoseman, Badge No. 223	27 Beaulieu St.
William F. Egan, Hoseman, Badge No. 225	69 Lilley Ave.

TRUCK COMPANY NO. 1

Lawrence Street

Timothy Brown, Captain, Badge No. 209	27 So. Whipple St.
Timothy Dwyer, Lieutenant, Badge No. 210	23 Sidney St.
John J. Lowney, Driver, Badge No. 215	361 Lincoln St.
Jas. F. McGuinness, Ladderman, Badge No. 213	119 Agawam St.
Pat'k H. O'Laughlin, Ladderman, Badge No. 216	Truck House
Charles J. Meehan, Ladderman, Badge No. 212	30 Mead St.
James H. Lannon, Ladderman, Badge No. 214	819 Lawrence St.

TRUCK COMPANY NO. 2

Westford Street

Daniel W. Hilliard, Captain, Badge No. 121	20 Osgood St.
George W. Alcott, Lieutenant, Badge No. 120	62 Grove St.
Willis S. Holt, Lieutenant, Badge No. 122	8 Hale St.
George A. Dickey, Driver, Badge No. 130	47 Grace St.
Hamblin S. Gardner, Ladderman, Badge No. 131	8 Hastings St.

Edgar E. Smith, Ladderman, Badge No. 132	62 Wilder St.
Quincy A. Foster, Ladderman, Badge No. 126	29 Midland St.
Herbert W. Hilliard, Ladderman, Badge No. 124	20 Osgood St.
Frank E. Harris, Call Man, Badge No. 129	Truck House

TRUCK COMPANY NO. 3

Palmer Street

Herbert A. Merrill, Captain, Badge No. 110	4 Wachusett St.
Harry F. Harris, Lieutenant, Badge No. 141	Truck House
Thomas F. Conway, Lieutenant, Badge No. 117	148 Sixth St.
Fred O. J. Townsend, Driver, Badge No. 112	14 Somerset St.
William T. Foss, Ladderman, Badge No. 113	37 Pond St.
Robert Carland, Ladderman, Badge No. 111	17 Second St.
John J. McManmon, Ldman, Badge No. 114	23 Woodward Ave.
Patrick J. Finnerty, Ldman, Badge No. 119	113 Lawrence St.
John P. Moore, Ladderman, Badge No. 116	1017 Central St.
Martin F. McNally, Ldman, Badge No. 115	57 So. Whipple St.

TRUCK COMPANY NO. 4

West Sixth Street

Joseph D'Amour, Captain, Badge No. 100	24 Fisher St.
James W. Adams, Lieutenant, Badge No. 101	86 Beech St.
John J. Flynn, Lieutenant, Badge No. 103	18 Ross Ave.
Joseph E. Fontaine, Driver, Badge No. 109	259 W. Sixth St.
Edward Landry, Ladderman, Badge No. 108	29 Beaulieu St.
William O. Lussier, Ladderman, Badge No. 102	9 Bowers St.
Nathaniel Landry, Call Man, Badge No. 105	29 Carolyn St.
William N. Flagg, Call Man, Badge No. 104	75 Whitney Ave.

PROTECTIVE COMPANY NO. 1

Warren Street

William H. Halstead, Captain, Badge No. 135	47 Methuen St.
Jas. W. Halstead, Lieutenant, Badge No. 136	115 Warwick St.
Geo. A. Campbell, Lieutenant, Badge No. 150	73 Mammoth Rd.
John F. Ambrose, Patrolman, Badge No. 131	212 Princeton St.
George E. Schofield, Patrolman, Badge No. 134	95 Myrtle St.
Joseph J. Malone, Patrolman, Badge No. 133	427 Lincoln St.
William H. Bamford, Patrolman, Badge No. 151	53 Main St.
Berry M. Simpson, Patrolman, Badge No. 132	5 Third St.

FIRE ALARM TELEGRAPH

LOCATION—Palmer Street Engine House

Henry C. Fernald, Operator.

Thomas McCormick, Lineman.

Arthur E. King, Lineman.

Robert G. Rutherford, Lineman.

Ten-circuit Automatic Repeater with Storage Battery of cups	600
Miles of Wire	113
Signal Boxes	163
Engineers' Gongs	8
Engine House Gongs	17
Indicators	18
Tape Register	1
Bell Strikers	12

Gong and Indicator at Police Station.

Gong in Pumping Station.

Gong on Merrimack Square.

Gong on Tower's Corner.

Gong on Northern Depot.

Gong corner Moody and Aiken Streets.

Gong corner Bridge and First Streets.

The strikers are located as follows: Palmer Street Engine House, Varnum School House, High Street Church, Court House, No. 1 Engine House, Franklin School House, Pawtucketville Engine House, No. 6 Engine House, Highland School House, Lawrence Street Engine House, Cornell Street School House, West Sixth Street Engine House.

Fifteenth Annual Report

OF THE BOARD
OF

Park Commissioners

OF THE
CITY OF LOWELL



For the Year Ending December 31
1917.

THE LAWLER PRINTING CO.
16 MARKET ST., LOWELL, MASS.

Board of Park Commissioners

1917

THOMAS F. McKAY, 1914-1919

CLARENCE M. WEED, 1914-1918

HARVEY B. GREENE, 1915-1920

ROBERT F. MARDEN, 1916-1921

ALEX. E. ROUNDTREE, 1917-1922

COMMITTEES

Parks: MR. WEED, MR. MARDEN, MR. GREENE

Playgrounds: MR. GREENE, MR. McKAY, MR. WEED

Trees

MR. ROUNDTREE, MR. McKAY, MR. GREENE

Legislation:

MR. MARDEN, MR. ROUNDTREE, MR. WEED

OFFICERS

Chairman

THOMAS F. McKAY

Secretary

ALEXANDER E. ROUNDTREE

Superintendent of Parks and Playgrounds

JOHN WOODBURY KERNAN

Department of Public Parks

COMMISSIONERS' REPORT.

To His Honor the Mayor and the Municipal Council of the City of Lowell, Massachusetts.

As required by Chapter 28, Section 13, of the Revised Laws of Massachusetts, entitled "Public Parks, Playgrounds and the Public Domain", the Board of Park Commissioners of the City of Lowell has the honor to submit their annual report.

THOMAS F. McKAY,

Chairman.

PARK AREAS AND THEIR VALUATION.

Belvidere Park	1.77 Acres	\$20,000
City Hall and Memorial Grounds	0.50 "	65,700
Coburn Square	0.252 "	1,000
Colonial Avenue Riverbank	3.50 "	2,000
Fayette Street Playground	0.170 "	2,000
Franklin Square	0.058 "	1,500
Glacial Oval		100
Harris Oval	0.12 "	366
Hillside Park	0.061 "	80
Hovey Square	0.010 "	50
Hutchinson Square	0.037 "	150
Lenox Square	0.181 "	1,500
Lincoln Playground	1.525 "	6,000
Lincoln Square	0.016 "	200
*Lucy Larcom Park	0.50 "	21,970
Mansur Square	0.050 "	150
Middlesex Square	0.034 "	200
Monument Square	0.092 "	15,000
Mt. Vernon Park	0.50 "	4,350
North Common	11.39 "	100,000
Parker-Spalding Park	0.043 "	60
Pawtucket St. Park at Northern Canal	0.911 "	6,620
Penniman Square	0.051 "	450
Princeton Square	0.028 "	150
Raven Road Park	0.083 "	180
Riverside Park	0.105 "	184
Rogers Fort Hill Park	34.40 "	150,000
Shedd Playground	56.00 "	50,000
South Common	22.48 "	200,000
Tyler Park	1.81 "	8,000
Varnum Avenue Riverbank	1.018 "	5,150
Varnum Park	0.136 "	6,000
Water Works Square	0.047 "	500
Wyman Park	5.22 "	2,088
<hr/>		
Total	143,098 Acres	\$671,698

*Held by the Chairman of the Park Commission and the Mayor as Trustees, not under the direct charge of the Park Commission.

Report of the Park Commissioners

For the Year 1917

The Board of Park Commissioners of the City of Lowell presents herewith the fifteenth annual report.

As in previous years, the work of the Board has had to do with three main lines of activity—Parks, Playgrounds and Street Trees. While each phase has had the attention of a special committee, the various activities have been carried with the cordial endorsement of all the members.

As in other recent years, the chief expenditures of the appropriations have been for the upkeep of the many parks and playgrounds under our care—a task which the constantly rising cost of labor and materials renders increasingly difficult. Notable progress, however, has been made in completing the grading and planting along the front of Shedd Park so that this important entrance to the city is now presentable. A start has also been made in the long projected improvement of the South Common Pool.

The most important innovations in connection with the playground work were the presentation of a Pageant depicting the history of Lowell and the establishment of children's gardens in connection with the city schools. The latter were so successful that

their continuance seems imperative, especially at this period when world conditions put such stress on all phases of food production.

Thanks to the cordial co-operation of the Locks and Canals Company we have been able to lease for the city two important breathing spots along the river, and thus add new links to the chains of river parkways that ought to make this one of the most beautiful cities in the world.

ACKNOWLEDGMENTS

No adequate acknowledgment of all the obligations incurred in the year's work of the Board is possible, but we desire to mention specifically a few of those whose helpful cooperation has made success possible.

His Honor, Mayor James E. O'Donnell, the other members of the Municipal Council, and the employees of the various city departments for cordial help during the year.

Mr. Arthur T. Safford, Engineer of the Locks and Canals, for sympathetic attention to the requests of the Board looking toward the future beauty of the city and the recreation of the citizens.

The Public Safety Committee, the school authorities, including several of the Grammar masters, the Middlesex Women's Club, the Lowell Board of Trade, the Middlesex North Agricultural Society, the Mill Agents and the Young Women's Christian Association for help in connection with the playgrounds and children's gardens.

The students of the Lowell Normal School for generous assistance in connection with the school garden exhibit.

The local newspapers for appreciative publicity of the activities of the Board, especially in connection with the Playgrounds and Gardens.

Superintendent John W. Kernan, the playground supervisors and the several employees of the department for their faithful service.

Mr. Edward T. Cushing for use of the Kasino in preparation for the playground pageant.

Mr. Charles T. Donohue for use of land on High street for children's school gardens.

APPROPRIATIONS FOR 1918

Realizing the stress of present financial conditions, the Board asks for practically the same appropriation for maintenance as last year, except that provision is made in the estimate for a labor cost increase of twenty-five cents a day, which seems imperative. Under special appropriations, the same amount is asked for Playgrounds as was spent last year and a slight increase in the item for the Care of Street Trees, which is needed to take down many dangerous trees in all parts of the city.

Recent accidents have emphasized again the necessity of furnishing safe places for wading and bathing for Lowell children. We have provided a wall and walk around the South Common Pool and need \$3,000 to finish it with satisfactory bottom and surroundings.

The only new project which we are asking for is a most important opportunity to furnish a safe bathing pool in connection with the canal at Cheever street. This is in a district where it would be a boon to thousands, and the Board is unanimous in the opinion that it is by far the best solution yet proposed of the bathing problem which has been agitated for so many years. The sum of \$5,000 is asked for this purpose.

SUMMARY

The requests for the 1918 appropriation may be summarized as follows:

Appropriation for Maintenance	\$17,156.00	
Care of Street Trees	2,000.00	
Playgrounds	4,000.00	
So. Common Wading Pool	3,000.00	
Cheever St. Bathing Pool	5,000.00	
Repair City Hall and Library Grounds	500.00	
Maintenance Lucy Larcom Park	150.00	
Total		\$31,806.00

Respectfully submitted,

THOMAS F. McKAY,
ALEXANDER E. ROUNTREE,
CLARENCE M. WEED,
HARVEY B. GREENE,
ROBERT F. MARDEN,

Board of Park Commissioners.

Finance Report

LOWELL, MASS, December 31, 1917.

*To His Honor the Mayor and the Municipal Council
of the City of Lowell, Massachusetts.*

GENTLEMEN:—

The Board of Park Commissioners has the honor to submit herewith the Fifteenth Annual Report of the Park Department of the city for the fiscal year ending December 31, 1917. In presenting you this report, we have given a statement of the receipts and expenditures for the fiscal year, the financial condition of the several appropriations, the Superintendent's report to this department of the work and labor done in the parks and commons of this city.

PARKS

Appropriation	\$13,900.00
Credits	10.00
	<hr/>
Total Appropriation	\$13,910.00
Expended for Labor	\$11,588.71
Expended for "Other Expenses"	2,321.29
	<hr/>
	13,910.00
Balance	0.00

We received from the rental of lots on the South Common, on July 4th, the sum of \$1,375, which was paid into the City Treasury and placed to the credit of the appropriation for parks by the City Auditor.

SUNDRY EXPENSES

Original Appropriation		\$5,000.00
Receipts from South Common Lots		1,375.00
		<hr/>
Total Appropriation		\$6,375.00
Expended for Shedd Park Improvement	\$ 333.27	
Expended for No. and So. Common Improvement	3,333.87	
Expended for New Auto Truck	750.00	
Expended for Trees—Labor	\$1,482.66	
Bills	203.20	1,685.86
		<hr/>
		6,103.00
		<hr/>
		\$272.00
Set Aside on Account of South Common Pool		272.00
		<hr/>
Balance		0.00

PLAYGROUNDS

Original Appropriation		\$4,000.00
Expended for Supervision and Labor	\$2,552.97	
Expended for Materials and Supplies	1,447.03	
		<hr/>
		\$4,000.00
		<hr/>
Balance		0.00

BALANCE SHEET—PARKS

MAINTENANCE.

Name	IMPROVEMENT			
	Labor	Materials	Labor	Materials
Belvidere Park	\$ 91.03			\$ 91.03
City Hall and Mem. Bldg. Grounds	109.23			109.23
Coburn Square	52.23			52.23
Colonial Ave. Riverbank	6.36	\$5.00		11.36
Fort Hill	3,368.94	541.53	\$40.30	3,976.93
Franklin Square	23.43			23.43
Harris Oval	37.48			37.48
Hillside Park	20.62			20.62
Hovey Square	6.87			6.87
Lenox Square	11.25			11.25
Lincoln Playground	3.19			2.19
Lincoln Square	6.88			6.88
Mansur Square	6.87			6.87
Monument Square	36.08			42.82
Mt. Vernon Park	48.17			48.17
North Common	783.40	94.51	371.20	1,249.11
Parker-Spalding Park	18.45			18.45
Penniman Square	12.21			12.21
Princeton Square	24.37			24.37
Raven Road Park	22.17			50.52
Riverside Park	7.49	28.35	7.38	23.84
Shedd Park	727.67	15.86	774.19	1,517.72
South Common	1,671.34	338.48	133.93	2,143.75
Tyler Park	108.25			108.25
Varnum Ave. Riverbank	34.96	5.00		39.96
Varnum Park	26.89			26.89
Water Works Square	21.87			21.87
Office	2,680.02	191.70		2,871.72
Stable and Workshop	221.56	1,017.93		1,239.49
Lucy Lareum Park	73.43	41.06		114.49
	<u>\$10,261.71</u>	<u>\$2,295.13</u>	<u>\$1,327.00</u>	<u>\$26.16</u>
				<u>\$13,910.00</u>

Superintendent's Report

To the Board of Park Commissioners.

GENTLEMEN:—

I most respectfully submit herein my annual report of the Department of Parks and Playgrounds, City of Lowell, for the fiscal year ending Dec. 31, 1917.

It is my desire to also state for your information that our system of parks has been kept up to the highest possible standard during the year, both in the way of modern and scientific improvements, and in beautifying and cultivating the grounds, preserving the trees and retaining, as far as possible, the natural aspect of the landscape. As a result of my continued efforts, our park system, from the largest park down to the smallest outlying plot of ground, is in a good state of preservation.

The improvement and ornamentation of a public park is almost identical as the improvement and ornamentation of one's front or back yard, the difference is in the degree.

A family is indeed poor in resources and intelligence, that is incapable of doing something to improve the appearance and condition of the limited grounds that environ their home. The planting of a few shrubs, small trees, and the cultivation of a bed of flowers costs little, employs so little time, re-

quires such insignificant mental effort and does so much to gratify the senses, that it is rare to find any section of this large city destitute of this kind of improvement, and in passing through the districts people by the working classes, this statement will be verified.

In a larger degree the wealthy resident of the city also embellishes his home environment. His means and his cultivation enable him to produce larger variety of improvement and more expensive character of ornamentation, and he has a larger field in which to exploit his tastes. Within certain limitations what is thus executed is satisfactory. It is always a pleasure to pass through the residential districts of the wealthy classes in this as in every other large city, and while infinite variety prevails in the character of outdoor ornamentation, the landscape as a whole is pleasing in effect, rarely anything is found that is offensive.

Sometimes the wealthy find so much on their hands in the way of extensive grounds, that resort is made to the employment of a professional to secure satisfactory results in properly beautifying the landscape, and if he has fair ability and resources he will probably do well in the ornamentation of an acre or more.

So that, up to this limit, so far as the area improved is concerned, there is no positive scarcity of ability to design and to execute satisfactory outdoor embellishment, from the poor man with his little fenced-in-lot, to the rich man with his larger area of environment. The ability is native to each for

taking care of their respective possessions and adding something to the charm of the general landscape. It is only when legitimate outdoor embellishment of large areas of ground is to be accomplished that the classes of ability herein referred to become unequal to the task, the larger the area the more glaring the incompetency.

With expert advice, the front of Shedd Park along Rogers street and a part of Boylston street was planted with a number of shrubbery beds as originally intended. More than fifty varieties of shrubs, some of which were grown in our own nursery at Fort Hill Park, were used, and all thrived well for the first year. In doing this work some additional grading and sodding had to be done as well as bringing the sidewalks up to the established grade of the street.

At the South Common pond work was started in the rebuilding of same. Owing to the excessive costs of material required, it was deemed advisable to make it into a wading pool, shortening up the length a little. We were able to build the walls, which are of concrete, and lay the necessary drains, as well as install five catch basins. After this much of the work was completed, it was found that the funds available were insufficient to build the floor of the pool, but would build the walk around the outside of the wall. Accordingly, this was done and we now have a spacious walk of granolithic twelve feet wide, which will add much to the pool when completed. The coming year it is expected to lay the floor and install the necessary water connections. The upper

end will be seeded to grass and planted with a variety of shrubs.

The North Common was given the usual care and attention as in former years. In addition, some three acres of ground along Clark street were regraded, as it had become badly undulated by heavy storms, being on a slope. We were extremely fortunate in doing their work, in so far as cost was concerned, as we had the material, some 2,000 cubic yards, hauled onto the ground gratis. The plot was seeded down to grass and fenced off for the balance of the year. The coming summer it will offer a very desirable spot where mothers and babies can bask in the sunshine, and feel safe from being hit by a base ball, or interfered with in any way by athletic sports, as it is intended to reserve this plot for them alone.

Likewise at Fort Hill Park, besides our regular work in the way of maintenance, we regraded about an acre of ground near the nursery. It presented an offensive appearance to the eye, and was no longer a secluded plot since the establishment of the deer paddock, being along one of the main walks to the same. We did this work ourselves, furnishing our own material, and using our own teams, as we could best spare them from their regular work on maintenance. The appearance here is improved considerably, and favorably commented on by our visitors as they go by, on to the deer paddock.

An auto truck for use of the department was purchased during the year, and found to be satisfactory. As our small parks are widely scattered

throughout the city, it proved its worth on more than one occasion in saving time with a crew of men.

PLAYGROUNDS

Up to within a few years, children had room to play without needing the city's help. But now the residence sections are growing so fast that the children must play in the street unless some other provisions are made. Play they must, and the duty of providing for them devolves on the Park Board with the cooperation, as far as may be, of the school authorities, which I am glad to say is in evidence at every turn.

A sand box is the beginning of every playground. The small children get more pleasure out of that than any other one thing. Wherever a load of building sand is deposited in the street, you will notice the children swarming over it, and when clean, dry, beach sand is placed at their disposal, it never fails to delight them.

I am fully alive to the importance of giving the children a place to play as I believe it is the arena of health and the best school of citizenship. It is an accepted fact by everyone familiar with the work that the best results from playgrounds are reached only when there is competent supervision, and we are extremely fortunate in being able to secure skilled help along these lines.

Good leadership, perhaps the best leadership where it can be brought out, is supplied by the children themselves. On more than one occasion I have appealed to the leadership of boys and girls with the

happy result that order was maintained, the things that belonged to the public were carefully kept, and vandalism that was annoying and destructive was held in check by so many of the little rascals that were most pestiferous.

The economic value of playgrounds is becoming universally recognized. A dollar spent this year for the recreation and health of the children will pay ten dollars in dividends ten year from now in health and good citizenship. Money spent in keeping boys off the streets will save future, greater expenditures for the police and corrective institutions. Reliable statistics have proven that the opening of a playground has been followed by a noticeable decrease in the juvenile delinquency in that neighborhood. Aside from the economic standpoint, however, it is our duty to give to the children that which they are being deprived of by the rapid growth and commercialism of our city, that which is the birthright of every boy and girl, the opportunity of clean play and healthful recreation.

Nine playgrounds were opened on July ninth with a corps of twenty-five lady supervisors and five male supervisors, the men being assigned to the larger grounds. One lady supervisor gifted in the art of story-telling, visited all grounds, following a regular schedule, and continued her good work so ably started last year.

A new departure was instituted this last year, because of the times, in the establishing of school gardens, with a skilled supervisor in charge. Several plots of ground were secured in different parts of

the city, ploughed and fertilized, and then turned over to the supervisor, who had no difficulty whatever in securing many and willing workers to take up the new line of work. Some of the seeds used were furnished by the children themselves, but for the larger portion of them we are indebted to Mr. Edward Gallagher, editor of the Lowell Sun.

The children worked hard on the plots assigned to them and in many cases drew the interest of their parents. It was no uncommon sight, as I visited the different gardens near dusk, to witness a number of parents in and about the gardens giving their children additional advice on the proper method of farming.

The result of their summer's work was amply testified to by their wonderful display at the school garden exhibit held at the Kasino last fall.

We had this year still another new worker in our midst, in the person of a trained nurse from the Lowell Guild. She went from ground to ground, and, in some instances, followed the children into the home. Diseases known to children were noted and treated. Advice on first aid was also given to the supervisors, and her report at the end of the season proved an interesting document.

The apparatus on all the grounds was carefully inspected, and repaired where needed. About seventy new swings were purchased and divided up among the different grounds. We made the uprights for same out of old telephone poles, and by so doing a considerable saving was made.

A novel feature was introduced this year in stag-

ing for the closing day exercises a Pageant showing the city's history from the early Indian days down to the present. Through the kindness of Mrs. Sara Swan Griffin, the local historian, we were able to obtain the data upon which the Pageant was based. We, too, were extremely fortunate in securing the services of Mrs. Julian B. Keyes, who was placed in charge of the production. She worked hard and long in weaving into it the action, dances and scenic effects which developed what proved to be a thoroughly enjoyable and interesting exhibition.

The costumes worn by the children were made by themselves during the course of the summer at the industrial classes held on each playground. At these classes they were taught to be proficient in the use of the needle, and after inspecting some of the costumes worn at the Pageant, the remark was often heard, that the industrial side of the playground work was well taken care of.

Open air moving pictures were tried out on the South Common for the first time last summer, and proved a success beyond our expectations. The "kiddies" went wild with glee, many of whom had witnessed them for the first time. Many grown-ups, as well, were noticed in the audience, thoroughly enjoying the pictures.

For a second time a Community Dance was held at the South Common on the evening of August thirty-first. Nearly 20,000 persons packed the slopes down to the playstead in front of the band stand. The dancing arena was roped off and splendidly lighted by twenty-four big arc lights. All hands

seemed to be having a good time, and everybody appeared orderly. It was a thorough-going success.

TREES

This last year \$1,685.86 was spent on tree work in the public streets of our city. To my knowledge this is the largest amount spent in any one year, but not nearly enough when one considers their condition through previous neglect.

It is readily admitted that they make beauty shade, coolness and health and often attract new and desirable residents. They, too, have a tangible realty value as well as attracting people to settle in in a neighborhood which is well planted with healthy, live trees.

A new campaign was started last year in an endeavor to replace, and in some cases plant for the first time, street trees, in so far as the funds available would permit. One street was selected in nearly every section of the city and planted with Norway maples, grown from seedlings in our own nursery at Fort Hill Park. Tree boxes for protection were put around each tree and the tree itself supported in an upright position by means of rubber hose fastened to the tree box. Ninety per cent. of them thrived during the year, so a good beginning was made. It is hoped, with sufficient funds, to continue the policy of tree planting thus started.

Many dead trees were removed the past year, as well as decayed and dangerous branches cut away, which endangered life and limb. Much more re-

mains to be done, and will be attended to as far as our appropriation will permit.

In conclusion permit me to thank the Board for its support given during the year, employees of the department for their faithfulness, the city officials, the playground teachers, the newspapers, and the public in general for the many kind favors rendered, and the spirit of cooperation that has been shown the past year.

Respectfully submitted,

JOHN WOODBURY KERNAN

Superintendent.

SEVENTY-THIRD ANNUAL REPORT

OF THE

LOWELL CITY LIBRARY

TWENTY-EIGHTH REPORT

OF THE

LIBRARY TRUSTEES

OF THE CITY OF LOWELL
MASSACHUSETTS

FOR THE YEAR NINETEEN HUNDRED SEVENTEEN



LOWELL, MASS.

KILBURN PRINTING COMPANY,

389 CHELMSFORD STREET.

1918

ADMINISTRATION OF THE LIBRARY, 1917

Board of Trustees

HON. JAMES E. O'DONNELL, MAYOR, *Ex-officio*

HENRY H. HARRIS	.	.	.	.	Term expires 1918
JOHN T. DONEHUE, D. D. S.	.	.	.	.	" " 1919
EDWARD J. WELCH, M. D.	.	.	.	.	" " 1920
HUGH J. MOLLOY	.	.	.	.	" " 1921
ALEXIS E. BERTRAND, M. D.	.	.	.	.	" " 1922

Organization

HON. JAMES E. O'DONNELL, Chairman

JOHN T. DONEHUE, Vice-Chairman

FREDERICK A. CHASE, Clerk.

Librarian

FREDERICK A. CHASE

Asst. Librarian

ALICE M. MYERS

Assistants

ALICE H. KIDDER

HARRIET M. SULLIVAN

DOROTHY P. WEBSTER

ALICE L. DONEHUE

ANNETTE LEMAITRE

BLANCHE GRAY

Bindery

WALTER H. GILMAN

HARRY C. BOWEN

LEO MONGRAIN

Superintendent of Reading Room

STEPHEN T. WYMAN

Librarian of Children's Room

BERTHA G. KYLE

REPORT OF THE TRUSTEES FOR 1917

To the Honorable, the Municipal Council of Lowell:

Gentlemen:—The Trustees of the City Library herewith present their annual report for the year 1917.

FINANCIAL STATEMENT

Receipts

Appropriation by Municipal Council	\$17,500.00	
Fines, etc	813.68	
Received from Fund for restoring contents of Library	1,585.34	
Transfers from the John Davis Fund..	4,461.44	
		<u>\$24,360.46</u>

Expenditures

Salaries	\$12,823.29	
Lighting	737.48	
Binding	789.28	
Periodicals	909.01	
Books	904.87	
Sundries— Printing	\$584.26	
Water Tax	22.50	
Express, etc.	49.24	
Supplies	474.82	
Postage	60.65	
Repairs	149.60	
Miscellaneous	467.95	
		<u>\$1,809.02</u>
Expended for restoring contents of Library	1,585.34	
Delivery Stations	340.73	
Expenses of Children's Room, Sunday opening and Books, etc, charged to Davis Fund	4,461.44	
		<u>\$24,360.46</u>

JOHN DAVIS FUND

Income for 1917

Cash on hand at last report	\$ 505.18	
Interest and dividend earnings on investments and loans	3,124.19	
Proceeds of sale of American Telephone and Telegraph Co. 4% Bond	1,663.50	
Rebate on Taxes	88.09	
	<hr/>	\$5,380.96

Expenditures

Expenses of Children's Room	\$ 782.50	
Expenses of Sunday opening	281.48	
Books purchased for the Library	2,797.46	
Oil Portrait of David Neal purchased ..	500.00	
Contribution to the Library War Service Fund	100.00	
Cash on hand Jan. 1, 1918	919.52	
	<hr/>	\$5,380.96

JOHN DAVIS FUND

March 30, 1918.

A committee of the Trustees, consisting of Messrs. Molloy and Bertrand, today called on the City Treasurer, Fred H. Rourke, who produced for their examination the following securities of the John Davis Fund of which he is custodian.

LIST OF SECURITIES

Registered Bonds

Name	Due	Rate of Interest	Par Value
City of Boston	1919	3½%	\$10,000.00
Boston & Maine R. R.	1944	4½%	11,000.00
Boston & Maine R. R.	1926	4 %	10,000.00
Boston & Maine R. R.	1929	4½%	5,000.00
N. Y., N. H. & H. R. R.	1954	4 %	10,000.00
Illinois Central R. R.	1952	3½%	10,000.00
Boston & Albany R. R.	1952	3½%	4,000.00
Atch., Top. & Sante Fe	1995	4 %	1,000.00
Hartford, Conn.	1933	4½%	10,000.00
City of Fall River	1926	4 %	4,000.00
City of Baltimore	1958	4 %	5,000.00
City of Waterbury, Conn.	1950	4¼%	4,000.00
			<hr/>
			\$84,000.00

Railroad Stock

No. Shares	Name of Road	Price per Share	Amount
41	Boston & Maine (Common)	23	\$943.00
39	Boston & Albany	125	4,875.00
1	Nashua & Lowell	130	130.00
1	Concord & Montreal (4th Class)	80	80.00
			<hr/>
			\$6,028.00

Manufacturing Stocks

No. Shares	Name of Company	Price per Share	Amount
6	Lowell Bleachery	133	\$798.00

Miscellaneous Stock

12	American Tel. & Tel. Co.	99⅞	1,198.50
3	Lowell Gas Light Co.	177	531.00
			<hr/>
			\$1,729.50

Bank Stocks

No. Shares	Bank	Price per Share	Amount
9	Appleton Nat. Bank, Lowell.....	103	\$927.00
3	Old Lowell Nat. Bank, Lowell.....	98	294.00
2	Wamesit Nat. Bank, Lowell	96	192.00
11	Union Nat. Bank, Lowell	190	2,090.00
10	First Nat. Bank of West Newton	170	1,700.00
			<hr/>
			\$5,203.00

Savings Bank Book

Bank	Book No.	Amount
Central Savings Bank	35073	\$194.15

Mortgage Notes

A. H.	\$2,000.00
J. L. L.	550.00
<hr/>	
\$2,550.00	

Summary of Investments and Cash Assets

Name of Investment	Val. Mar. 30,'17	Val. Mar. 30,'18	Increase	Decrease
Registered Bonds	\$86,000.00	\$84,000.00		\$2,000.00
Railroad Stocks	8,543.00	6,028.00		2,515.00
Manufacturing Stocks .	798.00	798.00		
Miscellaneous Stocks ..	2,244.00	1,729.50		514.50
Bank Stocks	5,311.00	5,203.00		108.00
Savings Bank Book	186.53	194.15	\$7.62	
Mortgage Notes	2,550.00	2,550.00		
Cash in Bank	29.12	919.52	890.34	
<hr/>		<hr/>		
\$105,961.81		\$101,422.17	Net Decrease \$4,239.54	

The Stock certificates and Savings Bank book were properly issued and entitled to the Trustees. The Mortgage notes showed proper endorsements for all interest payments,, and the interest on the Savings Bank written up to date. The cash balance of \$919.52 was certified to by letter from Appleton National Bank.

HUGH J. MOLLOY

ALEXIS E. BERTRAND

AUDITING COMMITTEE.

EXHIBITIONS

Moscow, Buckingham Palace, Baby Beasts, Markets of the World, War, European Artists, Monsters of the Microscope, Four and Twenty Toilers, Apples, Old Newburyport Houses, Kindergarten Set, Animal Kingdom, Leslie Brook, Verona.

CONDITION OF THE LIBRARY

New Volumes purchased during the year	1,899
Volumes added by gift	60
Volumes added by binding periodicals	100
Worn-out books replaced	14
Duplicates purchased	1,045
Total number of volumes added	3,118
Total number of volumes in the Library	100,807
Periodicals and papers subscribed for	249
Periodicals and papers given	40
Number of volumes used, home and reference	162,813
Number of volumes consulted in the Reference Room	9,819
Magazines circulated	4,083
Library open, days	301
Total circulation	162,813
Average daily circulation	540
Largest monthly circulation (March)	18,060
Smallest monthly circulation (August)	9,551
Largest daily circulation (Jan 6)	665
Smallest daily circulation (Aug. 9)	36
Percentage of fiction read	72.2
Percentage of other classes	27.8
Children's Room circulation	30,883
Daily average	104

New Registration with Three Year Limit, April 1, 1910

Applicants received during the year	2,597
Applicants who did not call for cards	160
Number of names registered Dec. 31, 1917	25,727
Number of names registered Dec. 31, 1916	23,290
Total registered during the year	2,437

LIST OF DONORS, 1917.

	Vol.	Pamphlets
An Anglo-Saxon Mother	1	
Art Metal Construction Co.	1	
Bang, J. P.	1	
Beck, Jas. M.	1	
Britlain, H. E.	1	
Brookshire, E. V.	1	
Bross Foundation	1	
Burnham, Phdetus		14
Carnegie Endowment Fund	1	
Carbonnel, E.	1	
Carroll, H. K.	1	
Cheney, Wm. R.	1	
Comstock, W. C.	4	
Dartmouth College	1	
Dixon, Prof. W. M.	2	
Dutton, E. P. Co.	1	
Entwhistle, T. W.	7	
Figgis, J. H., D. D.	1	
Gallagher, E. J.	1	
G. A. R.	1	
Hendlam, J. W.	1	
Insull, Samuel	1	
Kearney, John	3	
Langtry, Albert P. Soc.	6	
Lennox, W. P.	1	
Longmans Green Co.	1	
Manchester Public Library	2	
Mary Baker Eddy Fund	1	
Murray, G.	1	
National Biscuit Co.	1	
National Cannors Assoc.	1	

Osgood, Wm. N., Esq.	1	
Peters, D. C.	1	
Princeton University	1	
Potter and Sargent	1	
Raymond, Geo. L.		1
Safety Engineering.....	1	
Spanish War Veterans	1	
Stowell, W. H. H.	1	
Vinton, Miss G. F.	1	
Wadleigh, J. C.	1	
Weston, G. B. and D. B.	1	
Waterhouse, S. W.		1
Wilson, H. W. Co.		1
White Co., Cleveland, Ohio	1	
W. C. T. U.	1	
	<hr/> 60	<hr/> 17



ANNUAL REPORT

OF THE

CITY SOLICITOR



FOR THE YEAR ENDING
DECEMBER 31, 1917



LOWELL, MASS.
BUCKLAND PRINTING CO., 72-74 MIDDLE STREET

REPORT

OFFICE OF CITY SOLICITOR
LOWELL, MASS.

December 31, 1917.

TO THE MUNICIPAL COUNCIL OF THE CITY OF LOWELL,

GENTLEMEN :

I respectfully submit the following annual report of the law department for the year 1917.

The following cases have been disposed of during the year :

30023 *Fred H. Desmond, p. p. a. vs. City of Lowell.*

This was an action of tort brought in the Superior Court in the sum of Ten Thousand Dollars. The writ was dated October 28, 1916 and was returnable the first Monday of January, 1917.

Trial was had at the April sitting of the court before a jury, who rendered a verdict for the city.

582 *Alice M. Stead vs. City of Lowell.*

This was an action of tort brought in the Police Court of Lowell in the sum of One Thousand Dollars, for personal injuries sustained on or about August 4, 1916 by falling over an obstruction in the sidewalk at a point near the Pawtucket bridge.

The writ was dated November 7, 1916 and was returnable the third Saturday of December, 1916.

Trial was had before Mr. Justice Enright who found for the defendant. The plaintiff entered an appeal to the Superior Court. The case was settled for the sum of One Hundred Seventy-five Dollars, which amount was paid by the National Engineering Corporation.

Mary McShea vs. City of Lowell.

This was an action of tort brought in the Police Court of Lowell in the sum of One Thousand Dollars, for personal injuries sustained while traveling on Broadway on or about February 14, 1916. The writ was dated January 19, 1916 and was returnable the third Saturday of January, 1917.

The case was settled without trial in court, and it was agreed that judgment might be entered for the plaintiff in the sum of One Hundred and Fifty Dollars, and judgment satisfied.

48 *Katherine Gorman vs. City of Lowell.*

(Police Court)

This was an action of tort brought by the plaintiff in the Police Court of Lowell in the sum of One Thousand Dollars for personal injuries sustained on Summer Street on or about February 16, 1916. The writ was dated January 3, 1917 and returnable the first Saturday of February, 1917. The case was settled without trial in court, and it was agreed that judgment might be entered for the plaintiff in the sum of One Thousand Dollars, and judgment satisfied.

Mary Hubert vs. City of Lowell.

This was a petition to the Superior Court for a jury to assess damages for land situated in Pawtucketville and taken by the city of Lowell for school purposes. The petition was filed January 6, 1917 and was returnable the first Monday of March, 1917. The case was settled without trial in court, and it was agreed that judgment might be entered for the petitioner in the sum of Two Hundred Dollars, and judgment satisfied.

Hannah C. McKeon vs. City of Lowell.

This was an action of tort brought by the plaintiff in the Police Court of Lowell in the sum of One Thousand Dollars for personal injuries sustained while traveling at a point on Mammoth Road near the westerly end of Pawtucket Bridge, on or about August 13, 1916. The writ was dated May 10, 1917 and returnable the third Saturday of June, 1917. The case was settled without trial in court, and it was agreed that judgment might be entered for the plaintiff in the sum of One Hundred Twenty-five Dollars, and judgment satisfied, said amount being paid by the National Engineering Corporation.

Charles Magee, p p. a., vs. City of Lowell.

This was a friendly suit brought in the police court of Lowell to recover the sum of Two Hundred and Fifty Dollars which was awarded to the plaintiff by the municipal council of the city of Lowell. The writ was dated May 19, 1917 and was returnable the fourth Saturday of June, 1917. Judgment was entered in the sum of Two Hundred Fifty Dollars by agreement, the case having been heard before Judge Enright.

29398 *Mary E. Flynn vs. City of Lowell.*

This was an action of tort brought in the Superior Court in the sum of One Thousand Dollars as damages for personal injuries sustained on or about July 15, 1916, by tripping over a shut-off pipe opposite 151 Summer Street. The writ was dated August 15, 1916 and returnable the first Monday of October, 1916. Trial was had at the April sitting of the Superior Court, and a verdict was rendered for the plaintiff in the sum of Three Hundred Dollars, which was duly paid and judgment satisfied.

John H. Rigg vs. City of Lowell.

This was a bill of complaint on account of the city's building a sewer across plaintiff's land. The bill alleged continuous trespass and sought abatement of the nuisance. The writ was dated Sept. 1, 1916 and ordered for hearing in the Supreme Judicial Court, the first Monday of March, 1916.

The case was settled without trial in court, and it was agreed that the petition be dismissed without prejudice and without costs to either party.

29198 *Thomas Varnum vs. City of Lowell.*

This was a petition to the Superior Court for a jury to assess damages for land taken by the City of Lowell for contagious hospital purposes, situated on the westerly side of West Meadow Road and westerly side of Gumpus Road. The writ was dated August 14, 1916 and returnable the first Monday of October, 1916.

The case was settled without trial in court, and it was agreed that judgment might be entered for the plaintiff in the sum of twenty-eight hundred dollars, and judgment satisfied.

269 *John J. Pinder vs. City of Lowell.*

This was an action of contract brought in the Police Court of Lowell by the plaintiff to recover the sum of two hundred eighty-five dollars for labor performed for the defendant from February 1, 1916, to May 5, 1916 at \$3. per day. The writ was dated May 5, 1916 and was returnable the second Saturday of June, 1916.

The case was settled without trial in court, and it was agreed that the following entry might be made, "Judgment for the plaintiff in the sum of Five hundred thirty-four dollars, and judgment and costs satisfied."

3077 *Robert J. Thomas vs. James E. O'Donnell et al.*

Edward H. Foye vs. Same.

Andrew G. Stiles vs. Same.

(Common Law)

These are three petitions for writs of mandamus brought by the plaintiffs against the mayor and all other members of the municipal council of the city of Lowell for the purpose of reinstating the plaintiffs in the offices of superintendent of water works, purchasing agent, and treasurer of said city, respectively.

The cases were consolidated and submitted together to Mr. Justice Pierce, upon the petitions and answers, who ordered that a peremptory writ should issue in each case, and at the request of the defendants reported the cases for the determination of the full court. The full court sustained the finding of Justice Pierce, and on May 25, 1917, writs were issued ordering the reinstatement of the several plaintiffs.

Andrew G. Stiles vs. Thomas J. Enright.

This is a petition requesting the court to exercise its discretion in directing the justice of the Police Court of Lowell to hear a petition of the city treasurer and collector of taxes of the city of Lowell for a review under chapter 624 of the Acts of 1911.

On the twentieth day of February, 1917 the municipal council of the city of Lowell passed an order purporting to remove the plaintiff from the office of treasurer and collector of taxes, and at the request of the plaintiff a public hearing was granted him on March 1, 1917, and after said hearing, at which the plaintiff was not present in person, but represented by counsel, the municipal council passed a vote for his removal. Within thirty days after said hearing, on March 23, 1917, the plaintiff brought a petition in said Police Court addressed to the justice of said court, praying that the action of said municipal council in removing him might be reviewed by said court. Mr. Justice Enright declined to hear the plaintiff on the ground that he had no jurisdiction therein.

32008 *Annie Scanlon vs. City of Lowell.*

This was an action of tort brought in the Superior Court in the sum of Two Thousand Dollars to recover for personal injuries sustained while traveling on the sidewalk at the corner of Elm and Central Streets on or about December 9, 1915. The writ was dated October 23, 1917, and returnable the first Monday of December, 1917. The case was settled without trial in court, and it was agreed that judgment might be entered for the plaintiff in the sum of Four Hundred Dollars.

Thomas C. Lee vs. City of Lowell.

This was an action of contract brought in the Police Court of Lowell in the sum of Three Hundred Dollars. The writ was dated August 3, 1917 and returnable the second Saturday of September, 1917. This case was not entered in court.

Patrick Cogger vs. National Engineering Corp. and City of Lowell, Trustee.

This was an action of contract brought by the plaintiff in the Superior Court in the sum of Five Thousand Dollars. The city was summoned as trustee in the matter. The law department prepared the necessary papers for filing with the court, but prior to return day of the writ, the National Engineering Corporation adjusted the matter with Cogger.

30575 *Emma Crockett vs. City of Lowell.*

This was an action of tort brought in the Superior Court in the sum of two thousand dollars for personal injuries sustained while traveling on Liberty Street in the City of Lowell on or about February 24, 1916.

Trial was had before Judge King, who found for the plaintiff in the sum of one thousand dollars. Exceptions were filed by the defendant and were still pending, when on December 29, 1917, the municipal council of the city of Lowell voted to pay to Mrs. Crockett the sum of one thousand dollars. This amount has been paid and an agreement for judgment filed with the court.

28949 *John B. Crowley vs. City of Lowell.*

This was an action of contract brought in Superior Court in the sum of fifteen hundred dollars. The plaintiff alleged that the city of Lowell owed him five hundred and forty-one dollars and sixty-seven cents, with interest from August 22, 1914, for services rendered as a member of the police department of said city. The writ was dated May 24, 1916, and returnable the first Monday of July, 1916. Trial was had at the October jury-waived session of the Superior Court before Judge Shattuck, who found for the plaintiff in the sum of five hundred dollars. Exceptions were taken by the defendant and were still pending on December 26, 1917, when the municipal council of said city voted to pay Mr. Crowley said amount of five hundred dollars. This amount has been paid, and an agreement for judgment filed with the court.

31946 *Sarah Goldman vs. City of Lowell.*

This was an action of tort brought in the Superior Court in the sum of four thousand dollars, to recover for personal injuries sustained while traveling on Liberty Street in the city of Lowell on or about April 11, 1917. The writ was dated October 25, 1917 and returnable the first Monday of December, 1917.

This case was settled without trial in court for the sum of seven hundred fifty dollars, pursuant to vote of the municipal council passed December 29, 1917.

Everett E. Tarbox vs. City of Lowell.

This was an action of contract brought by the plaintiff in the Police Court of Lowell in the sum of one thousand dollars

for work and labor performed in auditing the books and accounts of the City of Lowell. The writ was dated April 2, 1917 and returnable the first Saturday of May, 1917. The case was settled without trial in court, and by vote of the municipal council passed December 29, 1917, the sum of twelve hundred and ninety-six dollars was paid to Mr. Tarbox, which amount was in full payment for all work performed by Mr. Tarbox for the city of Lowell for the year 1917.

CASES PENDING.

Benjamin F. Nichols et al vs. City of Lowell.

This is an action of contract brought by the plaintiff in the Superior Court for Suffolk County in the sum of Five Thousand Dollars. The writ is dated October 2, 1917 and is returnable the first Monday of November, 1917. Pending.

*Proprietors of the Locks and Canals on Merrimack River
vs. City of Lowell.*

This is a petition to the Superior Court for a jury to assess damages for land taken by the city of Lowell, situated on the westerly side of School Street and Mammoth Road. The writ is dated June 8, 1917 and returnable the first Monday of August, 1917. Pending.

28896 *Frank Malloreys vs. City of Lowell.*

This is an action of contract brought in Superior Court to recover the sum of thirty-six hundred dollars and sixty-nine cents with interest thereon, from January 1, 1912, for paving stone sold and delivered to the city of Lowell during the year 1911. The writ is dated May 29, 1916 and returnable the first Monday of July, 1916. The case has been referred to an auditor, before whom several hearings have been held, and whose report is now awaited. Pending.

31404 *John H. Rigg, Admr. vs. City of Lowell.*

This is an action of tort brought by the plaintiff in the Superior Court in the Sum of Twenty Thousand Dollars as damages for the death of Mildred Ruth Rigg, due to the negligence of the city of Lowell in the construction of the Billerica Street sewer. The writ is dated June 26, 1917, and returnable the first Monday of August, 1917. Pending.

29985 *Frank W. Crocker et als. vs. City of Lowell.*

This is an action of contract brought in the Superior Court in the sum of twenty thousand dollars. The writ is dated November 30, 1916 and returnable the first Monday of January, 1917.

Trial was had at the April sitting of the Superior Court before Mr. Justice Chase. A verdict was rendered for the plaintiff in the sum of nine thousand eight hundred and ninety-seven dollars and seventy-five cents.

Exceptions, which are now pending, were taken by defendant. Pending.

31995 *James C. Donovan vs. City of Lowell.*

This is an action of tort brought in the Superior Court in the sum of three thousand dollars for damage to plaintiff's property at the corner of Market and Palmer Streets, caused by the overflow of a city water main. The writ is dated May 3, 1917, and returnable the first Monday of July, 1917. Pending.

Leo O'Neil vs. City of Lowell.

Same vs. Same.

This is an action of tort brought by the plaintiff in the Police Court of Lowell in the sum of Three Hundred Dollars for injury to horse, harness and wagon, due to a defect in the roadway opposite premises numbered 250 Wentworth Avenue, on or about October 2, 1918. Two separate actions were brought; the first writ was dated December 27, 1916, and returnable the third Saturday of January, 1917. For want of proper service the defendant, on January 20, 1917, filed with the court a motion to dismiss the action.

The second writ was dated January 19, 1917 and returnable the fourth Saturday of February, 1917. Pending.

Mary A. Cheney vs. City of Lowell.

This is a petition to the Superior Court for a jury to assess damages for land and buildings taken by the city of Lowell on the southwesterly side of Mammoth Road. The writ is dated January 18, 1916 and returnable the first Monday of March, 1917. Pending.

30661 *Margaret W. Merrill vs. City of Lowell.*

This is an action of contract brought to recover the sum of Five Thousand Dollars, awarded by the municipal council of the city of Lowell, for the taking of real estate by the city of Lowell on the southerly side of Merrimack Street in said city. The writ is dated February 16, 1917, and returnable the first Monday of April, 1917. Pending.

City of Lowell vs. Lowell Trust Company.

This is an action of tort or contract brought by the plaintiff in the Superior Court to recover the sum of Forty Thousand Dollars as interests on deposits made by the plaintiff with the defendant. The writ is dated March 10, 1917 and returnable the first Monday of April, 1917. The case was referred to Joseph Wiggin as auditor, and several hearings have been held. Pending.

32376 *Julia E. Cote vs. City of Lowell.*

This is an action of tort brought in the Superior Court in the sum of Three Thousand Dollars for personal injuries alleged to have been sustained on or about March 3, 1916 while traveling on Rolfe Street in the City of Lowell. The writ is dated December 17, 1917 and returnable the first Monday of February, 1918. Pending.

Frederic A. Fisher et al vs. Fred H. Rourke.

This is a petition for a writ of mandamus to compel the treasurer of the city of Lowell to pay for certain steel purchased

by the city of Lowell from the New England Structural Company, brought by Members of the High School Commission in the Supreme Judicial Court. The steel was contracted for in 1916 by the Municipal Council, and after the election of the High School Commission in 1917, it was voted by said commission to pay for said steel, the payment of which had been held up by the Municipal Council.

The cause came on to be heard before Carroll J. who ordered the matter referred to James A. Brett, Esq., as auditor to hear the parties and their evidence, to find the facts and report the same to the Court.

The matter is still pending before the auditor.

3237 *Andrew G. Stiles vs. James E. O'Donnell, et als.*

Edward H. Foye vs. Same.

(Common Law)

These are two petitions for writs of mandamus brought in the Supreme Judicial Court by the petitioners against the mayor and all members of the Municipal Council of the city of Lowell for the purpose of reinstating the petitioners in the respective offices of treasurer and purchasing agent of said city. The respondents filed a plea in abatement, demurrer and answer in each case, and they were ordered to elect whether they would proceed on plea in abatement, demurrer or answer. The defendants elected to be heard on their answers, and requested that their rights be saved.

The cases were consolidated and submitted to Carroll J. upon the petitions and answers and certain communications.

The petitioner Stiles, after having received notice of the proposal of the Municipal Council to remove him from office,

requested a public hearing before said council, which hearing was granted, and thereafter he was removed from the office of treasurer of the City of Lowell.

Petitioner Foye also was granted a public hearing after receiving notice of proposed removal from the office of purchasing agent of the City of Lowell.

Judge Pierce ordered that peremptory writs should issue in each case, and at the request of the parties reported the cases on all questions of law for the determination of the full court. Pending.

City of Lowell vs. Lowell Trust Co.

City of Lowell vs. Andrew G. Stiles.

Same vs. American Surety Co.

Same vs. National Surety Co.

Same vs. U. S. Fidelity and Guaranty Co.

These are four several actions brought in Superior Court in the year 1917 by the city of Lowell against the defendant Stiles as city treasurer of said city, and against the other defendants as sureties on the bonds of said Stiles for the faithful performance of the duties of his office as treasurer and collector of taxes for the years covered by said bonds, to recover interest due the city of Lowell on daily balances of its moneys deposited with the Lowell Trust Company during the years 1902 and 1904 to 1916 inclusive. Pending.

Andrew G. Stiles vs. Charles J. Morse et als.

This is an action of tort brought in the Superior Court against the defendants, Charles J. Morse, George H. Brown and

Francis A. Warnock, Commissioners of said city, in the sum of five thousand dollars for alleged injury and damage to his reputation and standing as a public officer and as a citizen in the community. The writ was dated June 23, 1917 and returnable the first Monday of August, 1917. Pending.

Edward H. Foye vs. Charles J. Morse et als.

This is an action of tort brought in the Superior Court against the defendants, Charles J. Morse, George H. Brown and Francis A. Warnock, Commissioners of said city, in the sum of five thousand dollars for alleged injury and damage to his reputation and standing as a public officer and as a citizen in the community. The writ was dated June 23, 1917 and returnable the first Monday of August, 1917. Pending.

LAND COURT CASES.

No. 6105 *Aaron J. Harris and James J. Norton, Petitioners.*

This was a petition to register and confirm title to certain land in Lowell, located on Plain Street. The City of Lowell filed its answer objecting to granting of the petition which was dated December 27, 1916 and returnable January 22, 1917. The matter is still pending in the Land Court.

No. 6235 *Standard Oil Company of New York, Petitioner.*

No. 6543 *Standard Oil Company of New York, Petitioner.*

These were two petitions for registration of certain land in Lowell, returnable to Land Court, Boston, Feb. 5, 1917. Hearing was had and it was agreed that the lands in question might be registered and confirmed subject to all rights of the city to maintain, operate and use water pipes and hydrants, located in said land on Main Street in said city.

No. 6495 *Nicholas Casanas, Petitioner.*

This was a petition to register and confirm title to certain land in Lowell located on Livermore Street, returnable to Land Court, Boston, June 25, 1917. The city of Lowell filed its answer objecting to said registration. A hearing was had and the city assented to a decree, after a supplementary plan had been filed in amendment of the original to conform to the established street lines.

No. 6541 *Martha A. Gleason et al., Petitioners.*

This was a petition to register and confirm title to certain land in Lowell located on Gorham Street. The petition was dated July 25, 1917 and returnable to Land Court, Boston, August 20, 1917. The City of Lowell filed an answer, after which a hearing was held, and it was ordered by the court that a decree be entered for the petitioner subject to all rights acquired by the public in said land.

In the following cases no changes have been made during the past year:

- 3032 *Bragg Mfg. Co. (U. S. Ct.) vs. City of Lowell.*
869 *Bernard Delaney vs City of Lowell.*
922 *James Smith et al. vs. City of Lowell.*
274 *Peter Curran vs. City of Lowell.*
18230 *John H. Handley vs. City of Lowell.*
19073 *Winnifred Radigan vs. City of Lowell.*
20129 *City of Lowell vs. Lizzie Fitzgerald alias.*
19911 *Harry P. Graves, Admr. Est. of Andrew Peterson vs. City of Lowell.*
20176 *Edward Cawley vs. City of Lowell.*
882 *Hassam Paving Co. vs. City of Lowell (U. S. Dist. Ct.)*
20591 *Edwin E. McCausland vs. City of Lowell.*
1957 } *Grade Crossings (1910-Equity).*
1992 }
2402 *R. C. Maxwell Co. vs. James E. O'Donnell et al.*
23009 *Irving L. Hall vs. City of Lowell.*
2552 *Thos. F. Carroll et als. vs. John B. Clancy.*
590 *Sophia Hall vs. City of Lowell*
301 *George H. Jones vs. City of Lowell.*
24789 *Estella H. Richardson vs. City of Lowell.*
26302 *Edward D. Lyons vs. City of Lowell.*
28322 *Susan F. Taylor vs. City of Lowell.*
26498 *Dennis J. Cooney vs. City of Lowell.*
26303 *Lowell Trust Co. vs. City of Lowell.*
28002 *Edward Cawley vs. City of Lowell.*
28891 *Margaret W. Merrill vs. City of Lowell.*
29008 *George C. Dempsey et al vs. City of Lowell.*

- 29009 *George C. Dempsey et al. vs. City of Lowell.*
28892 *P. Dempsey & Co. vs. City of Lowell.*
28534 *Grace J. Jewett et al vs. City of Lowell.*
27988 *Ida C. Braun vs. City of Lowell.*
27985 *Elizabeth J. Shunny vs. City of Lowell.*
28003 *James Crompton vs. City of Lowell.*
27992 *Lowell Day Nursery Association.*
27987 *Almira Chapman vs. City of Lowell.*
27997 *Joseph Gagnon vs. City of Lowell.*
-

RECORD OF WORKMEN'S COMPENSATION.

In 1917, compensation was paid to twenty-three employees under the Workmen's Compensation Act, eighteen of which were new cases and the remaining five were carried over from 1916. Seventeen of the new cases were paid without dispute, evidence having been produced to show that the accidents were sustained in the course of and arising out of their employment. The other, Arthur Lord (deceased) was disputed by the City of Lowell, and an arbitration hearing had, the result of which has not been determined.

In 1917, \$2,981.75 was paid out under the Compensation Act; \$2445.45 of this amount as compensation to injured employees, and the balance of \$536.30 for medical and hospital services, expenses of arbitration, and miscellaneous expenditures connected with this work.

There was one fatal accident in 1917, one serious accident causing the loss of sight in one eye, and other injuries of a more or less minor character.

At the present time, there are six employees who are receiving compensation pursuant to this act.

WORK AND BUSINESS OF THE LAW DEPARTMENT.

Preparation and Trial of Cases in Court.

Writing of Contracts, and Formal Agreements.

Preparation of Releases, deeds and Other Papers.

Written Opinions and Advice to the various Officers and Heads of the City Government.

Conveyance of Real Estate.

Preparation of Orders, Ordinances, Resolutions and Votes.

Attendance at Legislative Hearings at State House.

Land Court Cases.

Investigation of Minor claims against the City, which do not enter court, but are disposed of without suit by the Municipal Council upon recommendation of the City Solicitor.

Workmen's Compensation cases.

OPINIONS

During the year, the following written opinions have been given:

Feb. 20. CHARLES J. MORSE: Relative to the rate to be applied as the standard for measuring the amount of pension to be paid to certain veterans in the service of cities and towns.

Feb. 23. BOARD OF LICENSE COMMISSIONERS: Relative to the transfer of a first-class license for the sale of intoxicating liquors to a building on Market Street.

Mar. 10. WILLIAM H. RIGBY: Rights of the cemetery commissioners in regard to the sale of old or abandoned burial lots in the Edson Cemetery.

Mar. 10. FRANCIS A. WARNOCK: Relative to the authority of the Municipal Council in directing an audit of the books of the city.

Mar. 20. JAMES E. DONNELLY: As to whether or not the Municipal Council is vested with power to change the precinct lines in a ward, or increase the number of precincts therein.

Mar. 22. BOARD OF SINKING FUND COMMISSIONERS: Relative to the status of Andrew G. Stiles as treasurer of the Board of Sinking Fund Commissioners and relative to the bond of Fred H. Rourke.

Mar. 24. LICENSE COMMISSION: As to the propriety of the License Commission's issuing a license to an incorporated club under R. L. c. 100, Sec. 88.

May 9. THOMAS F. FISHER: As to the liability for students of the Vocational School, placed in industrial establishments of the city for instruction.

May 16. MUNICIPAL COUNCIL: As to the legality or validity of the appointment of the High School Building Commission.

June 12. MUNICIPAL COUNCIL: Relative to demands for payment of salary to Andrew G. Stiles, Robert J. Thomas and Edward H. Foye.

June 13. HUGH J. MOLLOY: As to the rights of the City of Lowell to the land on which the old Bartlett School stands.

Aug. 14. BOARD OF LICENSE COMMISSIONERS:

In regard to the issuance of a fourth-class license in lieu of a first-class license that has been surrendered and cancelled, and regarding the refund of the license fee.

Sept. 10. HUGH J. MOLLOY: As to the status of janitors employed in training schools, so-called, under the Workmen's Compensation Act.

Oct. 17. MUNICIPAL COUNCIL: As to the legality of an ordinance to prosecute persons delivering liquor to soldiers.

Respectfully submitted,

WILLIAM D. REGAN,
City Solicitor.

CITY SOLICITORS

1840-1917

Name	Date of Election	Term of Service
Thomas Hopkinson	Apr. 7, 1840	
John A. Knowles	May 31, 1841	
Richard G. Colby	Apr. 13, 1842	
Seth Ames	Apr. 26, 1843	
Isaac S. Morse	July 31, 1849	
Theodore H. Sweetser	Jan. 3, 1853	
Arthur P. Bonney	Jan. 9, 1855	
Alpheus R. Brown	Jan. 8, 1856	
Robert B. Caverley	Jan. 12, 1857	
Alpheus R. Brown	Jan. 4, 1858	
Theodore H. Sweetser	Jan. 3, 1859	
Alpheus R. Brown	Jan. 6, 1862	Jan. 6, 1862 to Mar. 1, 1864
Tappan Wentworth	Feb. 23, 1864	Feb. 23, 1864 to Mar. 1, 1867
George Stevens	Jan. 7, 1867	Mar. 1, 1867 to Mar. 1, 1870
John F. McEvoy	Jan. 25, 1870	Mar. 1, 1870 to Mar. 1, 1872
Joshua N. Marshall	Jan. 1, 1872	Mar. 1, 1872 to Mar. 1, 1873
John F. McEvoy	Jan. 6, 1873	Mar. 1, 1873 to Mar. 1, 1875
George F. Richardson	Feb. 9, 1875	Mar. 1, 1875 to Mar. 1, 1880
George F. Lawton	Jan. 5, 1880	Mar. 1, 1880 to Mar. 1, 1883
Nathan D. Pratt	Jan. 1, 1883	Mar. 1, 1883 to Mar. 1, 1885
George F. Lawton	Jan. 5, 1885	Mar. 1, 1885 to Mar. 30, 1886
John J. Pickman	Apr. 6, 1886	Apr. 6, 1886 to Mar. 1, 1887
William F. Courtney	Jan. 14, 1887	Mar. 1, 1887 to Mar. 1, 1888
Frederic T. Greenhalge	Jan. 24, 1888	Mar. 1, 1888 to Mar. 1, 1889
Larkin T. Trull	Jan. 7, 1889	Mar. 1, 1889 to Mar. 1, 1891
John J. Hogan	Feb. 10, 1891	Mar. 1, 1891 to Aug. 5, 1895
Francis W. Qua	Aug. 1, 1895	Aug. 5, 1895 to Mar. 1, 1903
William A. Hogan	Jan. 6, 1903	Mar. 2, 1903 to Mar. 1, 1905
J. Gilbert Hill	Jan. 3, 1905	Mar. 1, 1905 to Mar. 1, 1909
William W. Duncan	Jan. 4, 1909	Mar. 1, 1909 to Jan. 2, 1912
J. Joseph Hennessy	Jan. 2, 1912	Jan. 2, 1912 to Feb. 15, 1916
Harold A. Varnum	Feb. 5, 1916	Feb. 15, 1916 to Jan. 30, 1917
William D. Regan	Feb. 9, 1917	Feb. 9, 1917 to

LIST OF JURORS

FOR THE

CITY OF LOWELL

FOR THE YEAR

1918



LIST OF JURORS

A

Abbott, James M., 24 Fairmount st., broker.
Abbott, Leon D., 5 Parkview ave., foreman.
Abell, Orrin W., 31 Princeton st., printer.
Achin, Henry, Jr., 9 Plymouth st., insurance.
Achin, Victor, 749 Merrimack st., dealer.
Adams, John M., 511 School st., painter.
Adams, Mark A., 43 Berkeley ave., clerk.
Adams, Smith J., 11 Gilbride terrace, salesman.
Adams, Walter S., 49 Sixth st., machinist.
Adsit, Alvaro W., 228 East Merrimack st., second hand.
Ahearn, Joseph J., Jr., 16 Leroy st., blacksmith.
Alexander, J. Walter, 774 Moody st., clerk.
Alexandre, J. Henry, 197 White st., laborer.
Allard, Henry, 3 Lilley ave., clerk.
Allard, Joseph J., 114 Ennell st., storekeeper.
Allen, Walter M. N., 39 Elliot st., machinist.
Ambrose, Joseph M., 9 Alder st., operative.
Anderson, August, 23 Lundberg st., operative.
Anderson, Charles E., 7 Bowden st., molder.
Andreopolos, George, 493 Market st., dealer.
Andrews, John A., rear 11 So. Whipple st., leatherworker.
Andrews, J. Munn, 256 Andover st., manufacturer.
Angier, Charles A., 5 Coburn ct., dealer.
Appleton, Francis E., 49 Warwick st., paymaster.
Archambault, Amedee, 742 Merrimack st., undertaker.
Armitstead, Robert R., 228 Varnum ave., dealer.
Archin, Wilfred J., 358 Colonial ave., chauffeur.
Ashton, John T., 60 Orleans st., second hand.
Ashworth, James, 137 Stackpole st., gentleman.

Asquith, Sam., 36 Chatham st., manager.
Asselin, Charles A., 148 Ennell st., electrician.
Atherton, Charles S., 12 Cheney pl., clerk.
Atwood, William P., 3 Park View ave., chemist.
Angluin, David, 21 Crowley st., janitor.
Ayer, Lorenzo, 557 Varnum ave., gardner.
Ayer, William A., 27 Varnum ave., plumber.
Ayotte, Edward, 83 Salem st., operative.

B

Bachelder, Harry B., 158 Mt. Vernon st., manufacturer.
Bachelder, Mark O., 650 Stevens st., overseer.
Bagshaw, Charles H., 79 Wedge st., manufacturer.
Baldwin, Arthur L., 534 Merrimack st., chemist.
Balfrey, John, 65 Congress st., shoemaker.
Bancroft, Frank M., 7 Brookside st., motorman.
Bardzik, John, 94 Lakeview ave., barber.
Barker, Edgar H., 9 Mt. Hope st., instructor.
Barlofsky, Archie, 135 Howard st., clerk.
Barnes, Henry W., 30 Huntington st., banker.
Barber, Jesse, 76 Congress st., bleachery.
Barber, Joseph, 252 Pawtucket st., mfr.
Barney, Fred M., 606 Stevens st., real estate.
Barrett, Andrew E., 77 Mt. Vernon st., merchant.
Barrett, Edward J., 94 School st., grocer.
Barry, Charles E., 16 Spaulding st., operative.
Barry, Henry, 98 Boisvert st., operative.
Barry, Patrick H., 13 Sycamore st., watchman.
Barry, John H., 15 Lombard st., plumber.
Barry, George, 20 Lombard st., machinist.
Barry, William A., 34 Laurel st., clerk.
Barry, William J., 4 Hanks st., manufacturer.
Bartlett, Arthur, 370 Beacon st., civil engineer.
Basnett, George B., 625 East Merrimack st., barber.
Beals, Horace P., 84 Marlborough st., concrete business.
Bean, Ralph M., 15 Eighth ave., secretary.
Bean, Willis S., Daniels st., journalist.
Beane, Thomas J., 104 Pleasant st., life insurance.
Beaudry, Francois, 111 Fulton st., teamster.
Beaumier, Joseph, 11 Second st., clerk.
Belanger, Clovis, 768 Merrimack st., solicitor.

Beauregard, Oliver J., 868 Moody st., clerk.
Bell, Frank A., 19 Wachusett st., machinist.
Bellefontaine, Miller, 130 Riverside st., furniture dealer.
Beharrell, Joseph R., 121 Wentworth ave., carpenter.
Bennett, George H., 181 East Merrimack st., blacksmith.
Berard, Adelard, 577 Middlesex st., expressman.
Bergeron, Albert, 510 Moody st., salesman.
Bernier, Arthur J., 444 Fletcher st., clerk.
Bernier, Samuel J., 22 Rockdale ave., clerk.
Bibeault, Alfred, 110 Ford st., carpenter.
Bibeault, Alphonse, 21 Wilder ave., stone cutter.
Bill, Freeman M., 823 Andover st., merchant.
Billingsley, Fred, 320 Wentworth ave., liquor dealer.
Bishop, Herbert L., 28 May st., paymaster.
Bissonnette, John, 47 Mt. Washington st., painter.
Bissonnette, Zephyrin J., 300 Varnum ave., telegrapher.
Bilodeau, Napoleon J., 713 Merrimack st., undertaker.
Blazon, Donat, 131 Gershom ave., printer.
Blodgett, Emery F., 585 Chelmsford st., bookkeeper.
Blood, Cyrus F., 222 High st., clerk.
Blowen, Herbert, 25 Harrison st., ice cream maker.
Boardman, Edward, 467 Merrimack st., dealer.
Boardman, J. Harry, 710 Andover st., banker.
Boisclair, Joseph E., 7 Exeter st., barber.
Boisvert, Jacques, 363 Hildreth st., builder.
Bonin, Honore, 90 Aiken st., barber.
Boudreau, John B., 24 Crawford st., grocer.
Boulais, Arthur N., 8 Draeut st., grocer's clerk.
Boule, Lazare, 538 Moody st., operative.
Boulger, John B., 835 Moody st., merchant.
Bourdon, Michael, 5 Mt. Washington st., carpenter.
Bourque, Philip R., 19 Lombard st., carpenter.
Box, John W., 7 Lyon st., beltmaker.
Boyd, Joseph F., 31 Chestnut sq., manager.
Boyle, James H., 110 Congress st., conductor.
Boyle, William A., 3 Morton st., machinist.
Bradley, Albert, 1019 Central st., pool room.
Brady, Thomas, 198 Mammoth rd., manager.
Branchaud, Alberic A., 15 Dana st., manager.
Bray, Richard, 23 Belrose ave., master mechanic.
Brannan, Fred B., 186 Shaw st., bookkeeper.
Brassard, Maurice, 4 Butterfield st., clerk.
Brassard, Henry J., 68 Mt. Hope st., chauffeur.

Brennan, Owen E., 20 Crowley st., hardware dealer.
Brennan, Frank M., 150 Agawam st., brakeman.
Brierley, Eugene L., 74 So. Loring st., painter.
Briggan, George F., 22 Royal st., clerk.
Brigham, Charles R., 99 So. Walker st., manager.
Boughton, John L., 146 Chelmsford st., laborer.
Brigham, Charles R., 70 Queen st., clerk.
Brigham, Edward W., 5 Astor st., secretary.
Brissette, Rupert N., 5 Crescent st., clerk.
Broadbent, John W., 42 Maple st., weaver.
Brodeur, Arthur, 13 Gold st., clerk.
Brogan, Joseph, 80 Mt. Washington st., machinist.
Brosnahan, Patrick H., 796 Lawrence st., liquor dealer.
Brousseau, Pierre A., 43 Essex st., clerk.
Bourgeois, Gustave M., 76 Mt. Hope st., clerk.
Brown, Patrick W., 8 Marsh st., operative.
Brown, Patrick H., 980 Varnum ave., brakeman.
Brown, William J., 23 Chase ave., clerk.
Brunelle, Arthur J., 849 Moody st., clerk.
Brunelle, Oliva, 33 Gershom ave., operative.
Buckley, George, 190 High st., gas fitter.
Buckley, John T., 50 Willow st., painter.
Buckley, Timothy, 453 Riverside st., operative.
Burbank, Edgar P., 43 Second ave., operative.
Burbank, John E., 27 Central st., merchant.
Burbank, Percival P., 14 Eighth ave., dealer.
Burke, Edward N., 216 Nesmith st., retired.
Burke, William P., 30 Abbott st., watchman.
Burke, William H., 14 Warnock st., operative.
Burkinshaw, Joseph, 20 Grace st., druggist.
Brassard, Henry J., 68 Mt. Hope st., chauffeur.
Burns, Arthur G., 160 Pine st., clerk.
Burns, Francis A., 117 Stackpole st., bookbinder.
Burns, George E., 756 Central st., clerk.
Burns, James E., 23 State st., laborer.
Burns, Charles H., 69 Fourth st., barber.
Burt, Fred K., 52 Hanks st., druggist.
Burrill, John F., 612 Beacon st., clerk.
Burt, Walter N., 385 Walker st., clerk.
Brock, Charles F., 47 Seventh ave., clerk.
Brock, George S., 47 Seventh ave., agent.
Brown, James T., 53 Tolman ave., operative.

Byam, Arnold A., 12 Albert st., real estate.
Byam Otis, 79 Canton st., milk dealer.
Byam, George A., Jr., 100 Forest st., real estate.

C

Cadorette, Joseph, 118 Ennell st., mason.
Cady, George L., Jr., 150 Mt. Vernon st., box maker.
Cady, Louis 629 East Merrimack st., park dep't.
Cahill, Gerald, 127 Fort Hill ave., superintendent.
Caddell, John B., 37 Viola st., patternmaker.
Calnin, Martin, 7 Porter st., clerk.
Callahan, George T., 122 Humphrey st., advertiser.
Callahan, Phillip H., 82 Beacon st., painter.
Callery, Bartholomew, 24 Bourne st., Health Dept.
Calnan, Cornelius F., 84 Forrest st., U. S. Co.
Camire, Evariste A., 753 Moody st., storekeeper.
Cameron, James, 105 Georgia ave., dealer.
Campbell, Abel R., 23 Harris ave., real estate.
Campbell, Frank J., 709 Westford st., druggist.
Campbell, George M., 48 East Merrimack st., dealer.
Campbell, Thomas J., 848 Moody st., dealer.
Campbell, James C., 52 Bartlett st., operative.
Cannon, Michael F., 63 Lane st., printer.
Cantin, Eugene H., 104 School st., real estate.
Carmichael, James H., 59 Huntington st., overseer.
Caron, Amedee, 99 Ennell st., tailor.
Caron, Joseph, 34 Hastings st., operative.
Carpenter Henry 27 Ellis ct., shipping clerk.
Carrigg, John J., 35 Third st., stage manager.
Carroll, Daniel F., 216 Thorndike st., master plumber.
Carroll, John J., 97 Crawford st., machinist.
Carroll, Joseph P., 858 Chelmsford st., nurse.
Carroll, Thomas A., 81 Tremont st., publisher.
Carroll, Vetrell, 94 Crawford st., operator.
Casey, James B., 603 Chelmsford st., manufacturer.
Casey, James J., 815 Chelmsford st., manufacturer.
Cassidy, Frank A., 8 Livermore st., assistant janitor.
Catherwood, Robert, 58 Epping st., milkman.
Cawley, William F., 85 Rogers st., clerk.
Chaloux, William L., 88 Bartlett st., manager.
Chandler, George R., 107 Holyrood ave., teller.

Chambers, John H., 16 New st., teamster.
Chapman, Herbert L., 364 East Merrimack st., printer.
Chappell, Francis, 18 Ash st., laborer.
Chappell, Raymond, 18 Ash st., clerk.
Charron, Edmond J., 142 Grand st., machinist.
Charron, Sylva, 134 West st., chef.
Chase, George W., 18 Windsor st., merchant.
Chase, Walter I., 284 Gibson st., clerk.
Cheetham, Thomas, 24 Davenport West, manufacturer.
Cheney, Frederick R., 36 B st., tannery.
Carroll, Thomas A., 81 Fremont st., publisher.
Carroll, William A., 97 Crawford st., druggist.
Choate, Albert H., 40 Hawthorne st., drug clerk.
Chouinard, Zenon 689 Lakeview ave., repairer.
Choquette, Jeremie A. N., 89 Butterfield st., clerk.
Christman, Eustache, 154 Woburn st., grocer.
Cinqmars, Euclide, 16 Endicott st., operative.
Claffy, John W., 28 Lawrence st., second hand.
Clancy, Arthur F., 85 Gershom ave., conductor.
Clancy, John, 198 Riverside st., dealer.
Clark, Gilchrist, 148 Sixth st., brick mason.
Clay, Harry E., 10 Orford st., operator.
Cleary, Daniel, 47 Swift st., master plasterer.
Clowery, John J., 10 Alder st., barber.
Cluin, John J., 130 Fort Hill ave., jeweler and optician.
Coburn, Harry W., 214 Third st., dentist.
Coburn, Herbert E., 516 Andover st., real estate.
Coburn, Joseph V. B., 215 Mammoth rd., grocer.
Coburn, Clarence B., 215 Mammoth rd., retired.
Coburn, Raymond G., 516 Andover st., clerk.
Coffey, James J., 21 Marginal st., dealer.
Coffey, Timothy J., 21 Marginal st., grocer.
Cogger, John H., 80 White st., printer.
Coggeshall, Frederick H., 74 Nichols st., clerk.
Cole, Fred H., 727 East Merrimack st., foreman.
Cole, John W., 14 Fairfield st., restaurant.
Cole John H., 69 Bartlett st., operative.
Coleman, Joseph H., 881 Bridge st., painter.
Collins, Cornelius E., 394 High st., real estate and insurance.
Collins, Cornelius, 25 Orford st., retired.
Conant, Herbert J., 16 Grove st., clerk, B. & M. R. R.
Connolly, John F., 108 Agawam st., wool sorter.
Connor, Edward, 88 Seventeenth St., second hand.

Connor, John P., 445 Merrimack st., retired.
Connors, Charles, 103 Westford st., clerk.
Conroy, Robert F., 153 Appleton st., manager.
Conroy, John, 109 Bartlett st., operative.
Conroy, Thomas, 124 Bartlett, clerk.
Conway, Anthony A., 11 Marlborough st., dealer.
Conway, John T., 169 Sanders ave., express.
Conway, Richard, 15 Windsor st., clerk.
Cook, William H. 383 East Merrimack st., printer.
Cooney, Dennis J., 649 Westford st., liquor dealer.
Cooney, Joseph P., 2 Burns st., tannery.
Corbett, John H., 14 Burns st., provision dealer.
Coreoran, John J., 438 Fletcher st., asst. ticket agent.
Coreoran, Joseph N., 40 Fort Hill ave., printer.
Cormier, Edmond, 18 Race st., clerk.
Cosgrove, Christopher, 4-32 Pleasant st., agent.
Cossette, P. Napoleon, 33 Wannalancit st., real estate.
Cossette, Jeffrey, 40 Sparks st., dealer.
Cote, Raoul, 161 East Meadow rd., machinist.
Cottrell, William H., 11 Viola st., printer.
Coughlin, James, 356 Parker st., shoemaker.
Coupe, Matthew, 207 Worthen st., lodging house.
Cover, Frank G., 30 West Bowers st., dealer.
Cox, Terence J., 239 Stackpole st., barber.
Craig, Peter R., 25 Nesmith st., superintendent.
Crane, Eugene F., 517 Westford st., real estate.
Croft William, 380 Woburn st., dealer.
Cronin, Cornelius F., 344 Varnum ave., clerk.
Cronin, Dennis, 155 Stackpole st., waiter.
Cronin, Joseph L., 347 High st., reporter.
Cronshaw, John, 4 Cranes ave., inspector.
Crosby, Burton H., 111 Moore st., mason.
Crosby, Frederick H., 17 Otis st., plasterer.
Crotty, Edward C., 792 Broadway st., clerk.
Crowley, Robert E., Jr., 115 Fort Hill ave., real estate.
Crowley, William L., 23 Sarah ave., collector.
Cryan, Martin, 90 White st., dealer.
Cryan, Thomas E., 8 Batchelder pl., conductor.
Crysler, H. Stanley, 258 Gibson st., manager.
Cuff, John H., 18 Agawam st., moulder.
Cuff, Thomas F., 18 Agawam st., dentist.
Cuff, Thomas S. 195 Moore st., druggist.

Cull, John H., 84 Chapel st., printer.
Cull, Thomas F., 249 East Merrimack st., steam fitter.
Cummings, Marshall F., 20 Chelmsford st., clerk.
Cumiskey, Arthur J., 175 Princeton st.
Cunningham, Clarence, 34 Durant st., steward.
Cunningham, Walter J., 109 Mammoth rd., shoeworker.
Cunningham Fred W., 27 Fay st., shuttle maker.
Curley, John P., 15 Varney st., dealer.
Curtin, David, 150 West Sixth st., conductor.
Curtin, Edward A., 514 East Merrimack st., barber.
Curtin, Joseph P., 514 East Merrimack st., machinist.
Curran, John, 14 Mt. Grove st., inspector.
Cushing, Joseph L., 32 Mt. Washington st., manufacturer.
Cutler, John S., 840 Varnum ave., barber.
Cutting, Lawrence F., 78 Methuen st., clerk.

D

Dacey, James, 176 Andover st., clerk.
Daidy, Michael A., 445 Merrimack st., engineer.
Daigle, Henri, 17 Endicott st., operative.
Dallaire, Pierre V., 126 West Sixth st., barber.
Daley, Peter, 203 Broadway, laborer.
Dalton, Francis M., 55 Nesmith st., stenographer.
Dalton, John J., 55 Nesmith st., clerk.
Daly, John J., 19 North st., operative.
Daly, John W., 76 Andrews st., clerk.
Daly, William F., 20 Walden st., insurance agent.
Dana George R., 304 Andover st., dealer.
Dana, Harry C., 365 Worthen st., machinist.
Danahy, John J., 22 Crowley st., tinsmith.
Dane, George F., 53 Oakland st., B. & M. R. R.
David, Albert W., 234 Gibson st., clerk.
David, Olier, 38 Lilley ave., merchant.
Davis, Fred M., 47 Lundberg st., clerk.
Dawson, John J., 533 Middlesex st., manager.
Day, James E., 493 Gorham st., agent.
Dean, Eugene F., 203 Salem st., clerk.
Dean, Sam, 36 Chatham st., overseer.
Dean, John J., 92 Avon st., musician.

Dearborn, Lafayette A., 12 Totman st., engineer.
Decoteau, J. Damien, 100 Fourth ave., carpenter.
Demaras, Harry, 48 Lawrence st., constable.
Dempsey, Bartholomew, 117 Crawford st., operative.
Dempsey, Robert M., 117 Crawford st., operative.
Denault, Nazaire, 223 Christian st., carpenter.
Denault, Henry, 215 Christian st., tanner.
Derby, Lucius A., 148 First st., electrician.
Dery, Lewis, 63 Lilley ave., mason.
Desaulniers, Olivier L., 14 West Bowers st., clerk.
Descheneaux, Radrick, 767 Moody st., carpenter.
Desilets, Horace 27 Queen st., clerk.
Deslandes, Ambrose, 78 Queen st., barber
Desmarais, Edelmar S., 941 Lakeview ave., plumber.
Desmond, Daniel A., 19 Wright st., dealer.
Desrosiers, Joseph Z., 43 Sparks st., dealer.
Desrosiers, Louis J., 142 Ennell st., clerk.
Devlin, James P., 43 Willow st., printer.
Dextra, Joseph, 518 Merrimack st., barber.
Dillworth, Daniel F., 95 Agawam st., clerk.
Doherty, Henry P., 78 Bridge st., master painter.
Doherty, John J., 14 Hale st., mattress maker.
Doherty, Michael F., 44 Marion st., confectionery.
Donnelly, Edward J., 32 Lane st., conductor.
Donnelly, John F., 7 Newhall st., grocer.
Donohue, Michael J., 3 Brooks st., salesman.
Donahue, Patrick S., 9 Bassett st., machinist.
Drewett, Frank, 42 Plummer ave., machinist.
Donohoe, James H., 31 Bourne st., clerk.
Donovan, Daniel, 1235 Middlesex st., provisions.
Donovan, Francis D., 126 Mammoth rd., clerk.
Donovan, William H., 26 Madison st., dealer.
Doole, George Lee, 241 Moore st., operative.
Doran, Daniel, 173 School st., assistant superintendent.
Doran, Henry F., 61 Butterfield st., trimmer.
Dostaler, Frank X., 105 A st., provisions.
Dow, Oscar C., 374 High st., clerk.
Downs, Earl C., 3 Quimby ave., electrician.
Doyle, George J., 15 Whipple st., barber.
Dozois, George H., 187 White st., instructor.
Dozois, Hector A., 67 Varney st., machinist.
Dozois, Phillip H., 67 Varney st., operative.

Dragon, Anthony F., 30 Sarah ave., collector.
Drinan, George, 537 Merrimack st., machinist.
Drury, John E., 44 Hanks st., plumber.
Drury, Harry S., 44 Hanks st., plumber.
Dwyer, John, 56 Waverley ave., painter.
Dube, Joseph, Jr., 15 Livermore st., messenger.
Dubois, Arthur, 4 Robert st., repairer.
Dubois, Joseph, 793 Merrimack st., insurance.
Dubuque, George H., 196 Merrimack st., clerk.
Duffy, Martin E., 14 Eustis ave., cigar maker.
Duggan, Francis P., (U. S. C. Co.,) 26 Agawam st.
Dufresne, Edward P., 14 Wiggin st., clerk.
Dumas, George T., 11 Ash st., clerk.
Duncan, John W., 20 Ames st., plumber.
Dunklee, Fred W., 62 Lundberg st., foreman.
Dunlap, Harry, 116 Hanks st., merchant.
Dunlavey, John C., 647 Broadway, laborer.
Dunlay, John F., 682 Chelmsford st., truckman.
Dunlay, Patrick F., 16 Corson st., truckman.
Dunn, Charles W., 94 Fort Hill ave., clerk.
Dunn, Joseph, 610 School st., dealer.
Dupont, Arthur, 4 Willie ave., fixer.
Durant, Charles W., 157 Fort Hill ave., engraver.
Durant, Edward R., 157 Fort Hill ave., clerk.
Durkin, John T., 38 Harrison st., printer.
Durkin, Thomas J., 915 Lawrence st., compositor.
Dursthoff, Charles C., 1500 Gorham st., overseer.
Duval, Alfred, 544 Moody st., machinist.

E

Eagan, Thomas E., 93 Nelson ave., clerk.
Eames, Melvin, 32 West Sixth st., second hand.
Eastman, Raymond W., 9 Fifth st., carpenter.
Emmott, Walter H., 561 Westford st., manager.
Eno, Pierre T. A., 204 Moody st., agent.
Enright, George W., 344 Varnum ave., clerk.
Enwright, George J., 13 Phillips st., clerk.
Erdis, Hugh W., 240 Liberty st., merchant.
Estabrook, Howard M., 22 Seventh ave., meat cutter.

F

Fahey, John J., 197 Moore st.
Fairburn, George C., 445 High st., provision dealer.
Fall, George F., 694 Varnum ave., teamster.
Farley, Harry P., 36 Prescott st., bottler.
Farnham, Frederick W., 60 Marlborough st., civil engineer.
Farrell, John M., 2 West View st., auctioneer.
Farrell, Samuel T., 358 Wentworth ave., salesman.
Farrington, John C., 182 Perry st., clerk.
Farrington, Willis, 234 Nesmith st., gentleman.
Favreault, William A., 190 Pawtucket st., clerk.
Fecteau, Alexis F., 740 Merrimack st., clerk.
Fee, Thomas F., 126 Bartlett st., tailor.
Fife, James, 46 Merrill st., machinist.
Filion, J. Anaclet, 348 Hildreth st., jeweler.
Finlay, Martin B., 115 Andrews st., machinist.
Finlay, William D., 115 Andrews st., metal worker.
Finnegan, Francis J., 15 Crane ave., collector.
Finnegan, Daniel T., 11 Sidney st., teamster.
Flannery, Charles Thomas, 132 Pleasant st., conductor.
Flather, Frederick A., 68 Mansur st., treasurer.
Fleet, Sidney R., 329 East Merrimack, journalist.
Fleming, James H., 41 Rock st., laborer.
Fleming, Samuel, 35 Methuen st., bootmaker.
Flood, James H., 118 Bartlett st., dealer.
Flood, Terence E., 28 Mt. Grove st., carpet weaver.
Fogg, Charles C., 10 Robbins st., merchant.
Foisey, Joseph A., 327 Hildreth st., baker.
Foisey, Philip, Jr., 24 Gorham st., cook.
Forrest, Charles M., 30 Sanders ave., lumber dealer.
Forrest, Telesphore, 859 Lawrence st.
Fortier, Joseph M. G., 10 Orford st., watchmaker.
Fortin, Antoine, 903 Moody st., clerk.
Fortin, Leonce, 43 Plymouth st., manager.
Foye, Daniel, 769 Westford st., dealer.
Foye, James H., 769 Westford st., dealer.
Foye, John J., 469 Pine st., dealer.
Frawley, David F., 91 Eustis ave., glazier.
Frayne, John F., 349 Broadway st., barber.
Frechette, Wilfrid, 769 Merrimack st., overseer.
Freeman, Eugene C., 48 Varney st., clerk.

French, Albert F., 213 Park View ave., manufacturer.
French, Vernon A., 334 Mammoth rd., auto livery.
Frost, Charles E., 393 Mammoth rd., pedlar.
Frye, Austin A., 105 Eighteenth st., druggist.
Fuller, George B., 1524 Gorham st., lumber man.
Fullerton, Robert J., 17 Dutton st., second hand.

G

Gagnon, George, 837 Moody st., clerk.
Gagnon, Joseph A., 67 Mt. Hope st., buyer.
Gale, Charles A., 23 Jenness st., agent.
Gallagher, Charles A., 85 Gershom ave., inspector.
Gallagher, Charles J., 191 Pleasant st., druggist.
Gallagher, Edward, 300 Wilder st., hotel.
Gallagher, James J., 168 Cumberland rd., cigar store.
Gallagher, Thomas J., rear 34 Coburn st., clerk.
Galley, Arthur C., 17 Winthrop ave., draughtsman.
Galvin, William H., 535 Lawrence st., fireman.
Gamache, Emile, 9 Rhodora st., grocer.
Gannon, Daniel J., 71 Dover st., dealer.
Gardner, John J., 17 Waterford st., merchant.
Gargan, Frank, 81 Bartlett st., operative.
Garland, Arthur W., 27 So. Loring st., railroad clerk.
Garvey, Thomas F., 72 Lilley ave., cigar maker.
Gaudette, Octave, 44 So. Loring st., wholesale confectioner.
Gaudreau, Absalom E., 14 Stackpole st., fixer.
Gauthier, Alfred J., 38 Lilley ave., blacksmith.
Gelinas, Victor, 94 Ford st., grocer.
Gendreau, Flavien, Circuit ave., tannery.
Gendreau, George, 228 Woburn st., tannery.
Gendreau, John B., 71 Bolton st., tannery.
Genereux, Hildege, 17 James st., clerk.
Genest, Arthur, 475 Varnum ave., contractor.
Gerow, David, 162 Chelmsford st., hay and grain.
Gibbons, Michael, 542 Gorham st., machinist.
Gilbert, Arthur D., 173 Foster st., bookkeeper.
Gilbert, Franz S., 50 Laurel st., overseer.
Gilbride, Walter J., 506 East Merrimack st., druggist.
Gildee, James B., 35 Oak st., clerk.
Gill, Edmund J., 768 Merrimack st., state house, Boston.
Gill, Homer J., 28 Walker st., clerk.

Gillogley, Owen, 27 Walnut st., machinist.
Gilman, Albert I., 20 East Pine st., foreman.
Gilroy, Frank A., 145 Merrimack st., printer.
Giroux, Frederick, 156 Riverside st., teamster.
Goldberry, Bernard, 614 Wood st., laborer.
Gonzales, Harry L., 126 Gorham st., cutler.
Gookin, James, 74 Huntington st., furniture business.
Gookin, John J., 15 Aberdeen st., manager.
Gormley, Joseph H., 11 Lyon st., insurance.
Gordon, George W., 61 Loring st., laborer.
Gordon, J. Eugene, 100 So. Walker st., undertaker.
Gorman, James E., 566 Westford st., shoe dealer.
Grady, John J., 576 School st., laborer.
Grady, William E., 881 Varnum ave., manager.
Grandchamp, Napoleon, 12 Arthur ave., clerk.
Gray, Harry, 93 Dover st., provision dealer.
Gray, John J., 236 Plain st., real estate agent.
Gray, Michael J., 10 Kinsman st., clerk.
Green, John J., 3-37 Bartlett st., laborer.
Goodwin, William B., 93 Chestnut st., organist.
Gionet, Aime, 158 Fourth ave., insurance.
Giroux, Arthur H. R., 227 White st., insurance.
Guimond, Adelard, 80 D st., brakeman.
Guimond, Albert F., 823 Moody st., knitter.
Guimond, Amedee, 101 Aiken ave., knitter.
Guyette, Walter E., 372 Parker st., real estate.

H

Hacket, David, 16 Crawford st., Water Works.
Haggart, Daniel L., 60 Bartlett st., mule spinner.
Haggerty, Joseph, 52 Huntington st., telegrapher.
Haggerty, Timothy, 726 Lawrence st., helper.
Haggerty, Michael, 171 Powell st., blacksmith.
Haines, Olin M., 18 Upham st., machinist.
Hale, Milo W., Jr., 9 Glidden ave., clerk.
Haley, Michael, 8 State st., mason.
Halstead, Charles W., 47 Methuen st., elec. lt. station.
Hamel, Alfred, 100 Shaw st., checker.
Hamill, Bernard, 134 Dummer st., mason.
Hamlin, Charles E., 90 Fourth ave., electroplater.
Hanson, James S., 584 Westford st., horse dealer.

Harnois, Alfred, 472 Moody st., agent.
Harrison, Joseph W., 566 School st., overseer.
Harrigan, William H., 38 So. Walker st., collector.
Hart, Daniel J., 52 Colonial ave., master baker.
Hart, John J., 336 East Merrimack st., conductor.
Hart, Burnett E., 626 School st., jeweler.
Hartigan Chester F., 137 Moore st., shipper.
Hartigan, Thomas T., 137 Moore st., folder.
Hartnet, John J., 105 Liberty st., operative.
Hartwell, George W., 159 Sayles st., foreman.
Harvey, Joseph, 843 Moody st., master plumber.
Hawes, William H., 59 Canton st., broker.
Hayes, Daniel, 73 Fletcher st., motorman.
Hayes, William A., 43 Webber st., conductor.
Healey, Thomas, 921 Lawrence st., overseer.
Hearn, James, 50 Corbett st., watchman.
Hebert, Elzear R., 772 Moody st., clerk.
Heller, George E., 74 Inland st., machinist.
Hemman, Richard C., 245 Stevens st., cashier.
Henry, Daniel P., 140 Andover, dealer.
Hersey, Freeman S., 143 Forrest st., machinist.
Hetu, Hermidas, 12 Dane st., second hand.
Hersome, Albra, 22 Ash st., engineer.
Hickey, Walter, 643 Westford st., foreman.
Higgins, John J., 135 Andrews st., undertaker.
Higgins, Joseph J., 140 Avon st., grocer.
Hiland, Michael, 25 Ash st., operative.
Hill, James, 37 Whipple st., motorman.
Hindle, Ambrose, 27 Commonwealth ave., retired.
Hird, David, 12 Blodgett st., overseer.
Hoar, Martin J., 31 London st., folder.
Hoar, Michael H., 161 Walker st., insurance.
Hogan, John, 54 Bartlett st., shoemaker.
Hoisington, Charles F., 68 Thirteenth st., stove dealer.
Hollingsworth, Joseph K., 136 Jewett st., receiver.
Holmes, Charles W., 153 Varnum ave., cabinet maker.
Holmes, Percy, 837 Lakeview ave., wool sorter.
Horne, Fred, 150 Westford st., dealer.
Houde, Theotime, 27 Sarah ave., clerk.
Howell, Wakefield D., 69 Nichols st., clerk.
Howes, George E., 131 Varnum ave., salesman.
Howes, Walter I., 9 Mt. Grove st., stockfitter.

Hoyle, Albert, 124 Mt. Hope st., plumber.
Hoyle, Richard, 101 Congress st., bleachery.
Hubert, Romeo, 102 Cabot st., dealer.
Hughes, Joseph, 105 So. Highland st., grinder.
Hull, Frank B., 606 Stevens st., foreman.
Humphriss, Frederick G., 70 Smith st., watchman.
Hunt, Guy C., 594 Beacon st., second hand.
Hunt, Leonard D., 234 Cabot st., overseer.
Hunter, James F., 111 Liberty st., barber.
Huntington, Edward W., 69 Stevens st., clerk.
Husband, Thomas J., 31 Clark st., stable keeper.
Hylan, John B., 28 Nesmith st., gentleman.
Hyde, Daniel, 42 Humphrey st., machinist.

I

Ingham, Fred, 469 Wilder st., dealer.
Inglis, John J., 52 Hampshire st., clerk.
Ineson, William H., 1 Hampshire st., loom fixer.
Irish, Alanson E., 137 Stackpole st., clerk.
Irwin, John M., 83 Pine st., confectioner.

J

Jackson, John S., 120 Gates st., clerk.
Jalbert, Joseph, 100 Fourth ave., contractor.
Jantzen, Joseph W., 3 Olive st., dentist.
Jennings, Joseph, 859 Lawrence st., retired.
Jensen, Otto, 23 Webber st., receiver.
Jodoin, Augustus J., 28 Campaw st., operative.
Jodoin, Joseph H., Jr., 23 Claire st., machinist.
Johnson, Francis, 494 Lawrence st., real estate.
Johnson, Michael J., 328 Suffolk st., organist.
Johnson, Curtis W., 1 Plain st., bookkeeper.
Johnson, John H., 487 Andover st., carpenter.
Johnson, Thomas J., 183 Wilder st., clerk.
Johnson, Thomas W., 487 Andover st., carpenter.
Johnston, Alexander, 173 Stackpole st., baker.
Johnston, William L., 173 Stackpole st., baker.
Jones, Edwin F., 93 West st., decorator.

K

Kearney, John, 142 Third st., inspector.
Kearns, George J., 192 School st., clerk.
Keddie, George, 50 Quebec st., laborer.
Keefe, George F., 101 Beech st., electrician.
Kelleher, William P., 55 So. Whipple, N. E. Tel. & Tel. Co.
Kelley, Thomas L., 683 Rogers st., Mass. mills.
Kelley, Thomas F., 578 Andover st., clerk.
Kelley, William A., 799 Princeton st., dealer.
Kelley, William M., 32 John st., janitor.
Kelsey, John H., 52 Humphrey st., plumber.
Kenefick, William, 215 Stackpole st., engineer.
Kennedy, James J., 5 Livermore st., retired.
Kennedy, William R., 114 Warwick st., electric light trimmer.
Kennedy, Chester A., 114 Warwick st., clerk.
Kennedy, William H., 73 Fletcher st., janitor.
Kenneson, Herbert C., 33 Harrison st., clerk.
Keyes, Henry J., 9 Fort Hill ave., clerk.
Killpatrick, Charles T., 27 Maryland ave., real estate.
Killpatrick, Edwin W., 360 Wilder st., clerk.
Kilpatrick, John, 21 Bennett st., carpenter.
Kilroy, John, 99 Beech st., insurance agent.
Kimball, Clarence L., 785 Merrimack st., machinist.
Kimball, George D., 785 Merrimack st., real estate.
Kinal, Stefan, 131 Lakeview ave., dealer.
King, Walter, 205 Stackpole st., clerk.
King, Joseph D., 67 Bartlett st., lather.
King, Arthur, 205 Stackpole st., electrician.
Kinsella, John F., 50 B st., dealer.
Kirwin, John W., 919 Lawrence st., nickel plater.
Kittredge, Horace V., 34 Third ave., mason.
Kivlan, John H., 73 Moore st., bookkeeper.
Knapp, Harry P., 324 Andover st., pres. Talbot Co.
Knight, Richard K., 37 Hurd st., laborer.
Knowlton, Harry W., 24 Monadnock ave., draughtsman.

L

Laflamme, Gerdia J., 17 Burlington ave., clerk.
Lafleur, Frederick, 1081 Middlesex st.
Lafleur, Harvey A., 44 West Meadow rd., collector.
Lamoureux, Anselme, 152 School st., tailor.
Lamoureux, Frederick A., 71 Varnum ave., hardware dealer.

Lang, Frank J., 26 Prospect st., janitor.
Landry, Edward, 15 Gershom ave., clerk.
Landry Ernest, 15 Gershom ave., clerk.
Lapointe, Martin, 41 Nichols st., harness maker.
Larivee, John B., 187 Cumberland rd., conductor.
Larochele, Elzear J., 814 Moody st., reporter.
La Rock, Joseph, Jr., 57 Marshall st., operative.
Latham, Frank, 587 Stevens st., clerk.
Laurin, Carl G., 40 Lundberg st., stone cutter.
Lavelle, Raymond J., 282 Appleton st., advt. solicitor.
Lavallee, Henry, 75 Gershom ave., jeweler.
Lavallee, Rosario, 75 Gershom ave., jeweler.
Lavoie, Napoleon J., 515 Wilder st., milkman.
Lavoie, Arthur, 114 Ford st., grocer.
L'Esperance, Wilford, 30 Dutton st., druggist.
Leary, Daniel, 118 Mt. Washington st., plumber.
Leary, Jeremiah F., 99 Pleasant st., janitor.
Lecam, Joseph H., 30 Haines ave., clerk.
Lebrun, Nelson J., 192 Pawtucket st., clerk.
Ledoux, Damase A., 758 Moody st., merchant.
Lee, John J., 147 Gershon ave., salesman.
Lee, Robert J., 55 Laurel st., machinist.
Lee, Michael A., 64 Bartlett st., carpenter.
Lees, George, 25 Congress st., dyer.
L'Ecuyer, Joseph Hector, 7-502 Moody st., clerk.
Leggat, Horatius B., 640 Broadway, teacher.
L'Heureux, Henry, 121 Gershom ave., operative.
L'Henrlux, Joseph H., 536 Fletcher, machinist.
Lemkin, Morris, 5 Hampshire st., dealer.
Lennon, Thomas E., 144 School st., dealer.
Leonard, Terrance D., 181 Pleasant st., clerk.
Leveille, Arthur, 122 Mt. Washington st., clerk.
Lew, Fred P., 477 Merrimack st., dyer.
Lew, Harry H., 133 Gershom ave., dyer.
Lightowler, Freeman, 136 Grand st., clerk.
Little, Edwin F., 815 Moody st., stock broker.
Livingston, Cornelius S., 208 Branch st., paymaster.
Long, Dennis A., 610 Andover st., Prop. Sunday Telegram.
Loranger, Arthur, 14 Lawton st., operative.
Loranger, Louis, 67 Branch st., clerk.
Loranger, Zephirin Jr., 16 Ash st., clerk.
Lozeau, Napoleon M., 45 Endicott st., clerk.

Lull, George E., 11 Nesmith st., merchant.
Lundgren, Ernest, 31 Houghton st., dealer.
Lunt, Jason, 18 Lane st., merchant.
Lussier, Ferdinand, 83 Lilley ave., operative.
Lussier, George H., 903 Moody st., operative.
Lussier, Rosario, 170 Ennell st., clerk.
Lussier, William O., 9 Bowers st., machinist.
Lyle, James E., 19 Summit st., jeweler.
Lynch, Thomas J., 8-33 So. Whipple st., laborer.
Lynch, Patrick, 159 Walker st., barber.
Lynch, John, 175 Stackpole st., conductor.
Lyons, John K., 7 Westford st., pin maker.
Lyons, Murthey, 25 Cross st., clerk.
Lyons, Patrick A., 2-267 Worthen st., machinist.

M

Mack, John F., 292 East Merrimack st., clerk.
Magee, John J., 169 High st., grocer.
Magras, Joseph, 763 Moody st., clerk.
Maguire, George F., 280 High st., grocer.
Maguire, Hugh, 62 West Third st., clerk.
Maguire, John E., 35 Mead st., janitor.
Maguire, Thomas F., 236 Rogers st., solicitor.
Maguire, Philip F., 57 Sidney st., weaver.
Maguire, Patrick J., 35 Mead st., retired.
Mahoney, John J., 22 Burlington ave., clerk.
Mahoney, John P., 37 Laurel st., dealer.
Mahoney, Thomas, Jr., 46 Butterfield st., clerk.
Mahoney, Patrick J., 16 Lyon st., janitor.
Major, Frank A., 60 Rea st., second hand.
Maloney, James R., 97 Pleasant st., laborer.
Maloney, John J., 195 Pleasant st., barber.
Maloney, Michael J., 195 School st., gardener.
Mansfield, George F., 306 Wilder st., bookkeeper.
Mansur, Arthur F., 182 Andover st., retired.
Mansur, George W., 52 Clitheroe st., clerk.
Mansur, William L., 445 Merrimack st., clerk.
Marchand, Joseph P., 18 Sargent st., machinist.
Marden, Philip S., 11 Fairview st., managing editor.
Martin, John H., 196 Mt. Pleasant st., merchant.

Marin, Joseph, 213 Pawtucket st., real estate.
Markham, Michael J., 78 Chauncey ave., liquor dealer.
Marren, John J., 404 East Merrimack st., clerk.
Martel, Chester H., 76 June st., clerk.
Martell, Hormidas J., 799 Moody st., supt. wire works.
Martin, Edward F., 39 Durant st., retired.
Martin, John F., 45 Bartlett st., clerk.
Martin, Mizaël, 2-500 Moody st., tailor.
Mason, Charles, 21 Belle ave., machinist.
Mason, Lewis, 28 Belle ave., machinist.
Mathison, Charles W., 61 Tolman ave., manufacturer.
Mattè, Edward, 36 Gardner ave., tinsmith.
Maxwell, John F., 124 Hanks st., overseer.
May, Thomas, 1406 Varnum ave., gate tender.
Mayberry, Solomon S., 54 Jenness st., real estate.
McAleer, James E., 129 Llewellyn st., clerk.
McAloon, Fred F., 14 Pleasant st., weaver.
McAloon, John B., 112 Sixth st., weaver.
McAvoy, Thomas, 1 Fowler rd., dealer.
McBrayne, Lewis E., 6 Belmont st., asst. managing editor.
McCaffrey, John H., 186 Pleasant st., carpet weaver.
McCann, Patrick, 412 Lincoln st., dresser.
McCarron, Anthony, 142 Concord st., grocer.
McCartin, Patrick, 116 Pleasant st., conductor.
McCarthy, Andrew, 656 Gorham st., advertising.
McCarthy, Charles, 413 Walker st., laundryman.
McCarthy, John P., 9 Pihl st., machinist.
McCarthy, John P., 744 Merrimack st., operative.
McCarthy, Timothy F., 28 Butterfield st., clerk.
McCarthy, James F., Jr., 28 Butterfield st., clerk.
McCluskey, John A., 7 Keene st., foreman.
McCluskey, Frank H., 7 Keene st., machinist.
McCluskey, William J., 7 Keene st., reporter.
McCormick, John E., 108 Livingston ave., clerk.
McCullough, John, 281 High st., grocer.
McDonald, John J., 208 Mt. Hope st., second hand.
McElholm, William H., 465 Westford st., plumber.
McElroy, George T., 157 Agawam st., painter.
McElroy, Samuel H., 15 Chestnut sq., operative.
McEvoy, Arthur M., 104 Tenth st., student.
McGenniss, James, 23 Read st., insurance.
McGilly, Patrick, 75 Hoyt ave., wool sorter.

McGlinchey, Michael, 84 Manchester st., grocer.
McGovern, Patrick, 32 Bartlett, shoemaker.
McGreevey, Thomas X., 216 Foster st., operative.
McGreevy, Eugene, 216 Foster st., clerk.
McGrevey, James M., 216 Foster st., Water Dept.
McGreevy, J. Joseph, 216 Foster st., clerk.
McGreevy, Thomas H., 216 Foster st., clerk.
McHugh, Michael F., 258 Merrimack st., clerk.
McHugh, William E., 77 Fremont st., compositor.
McIninch, Robert J., 39 Chestnut sq., presser.
McIntyre, William G., 101 Norcross st., clerk.
McKay, Thomas F., 470 Rogers st., cracker dealer.
McKenna, George B., 13 Cosgrove st., undertaker.
McKenna, George T., 64 Otis st., conductor.
McKenney, Charles H., 133 White st., engineer.
McKeon, James E., 15 Seventh ave., clerk.
McKinnon, Murdock, 1782 Middlesex st., marketman.
McLarney, Hugh I., s2, 4 Runels pl., plumber.
McMahon, Frank, 2 Brooks st., clerk.
McMahon, Joseph F., 456 Chelmsford st., plumber.
McMahon, William H., 90 White st., steamfitter.
McMenamin, Francis, 162 Appleton st., clerk.
McNabb, James S., 106 Pleasant st., laundryman.
McNabb, John H., 108 Pleasant st., laundry.
McOsker, James F., 71 Butterfield st., tool maker.
McOsker, Thomas F., 23 Huntington st., cashier.
McPherson, William A., 97 Moore st., B. & M. R. R.
McQuade, Arthur F., 506 East Merrimack st., fixer.
McQuade, Daniel E., 509 East Merrimack st., dealer.
McQuaid, Arthur J., 197 Pleasant st., loomfixer.
McQuade Hugh B., 10 Pleasant st., second hand.
McSorley, Christopher, 155 Fayette st., clerk.
McSorley, John F., 332 Wentworth ave., dealer.
Mealey, Frank L., 509 School st., copper stamps.
Meehan, Edward J., 289 Concord st., teamster.
Meehan, Joseph P., 196 Westford st., clerk.
Meloy, Fred'k F., 30 Fort Hill ave., clerk.
Mercier, Chester, 284 Stevens st., clerk.
Mercier, Ernest B., 38 Aiken ave., baker.
Mellen, Edward, 74 Pentucket ave., laborer.
Mellor George H., 15 Belmont st., overseer.
Merrill, Herbert C., 157 Nesmith st., chemist.

Merritt, William H., 262 Concord st., bartender.
Mevis, George B., 869 Bridge st., merchant.
Miller, Charles H., 13 Harrison st., conductor.
Minahan, James H., 74 Aiken ave., operative.
Miskell, Martin J., 292 East Merrimack st., theatrical.
Mitchell, James W., 79 Mt. Washington st., carpenter.
Mitten, Anthony D., 43 A st., blacksmith.
Mueller, George A., 207 Worthen st., clerk.
Muldoon, Owen, 259 Branch st., laborer.
Murphy, Jeremiah F., 315 Summer st., manufacturer.
Mollahan, Peter L., 638 Chelmsford st., dealer.
Molloy, Andrew, 339 Riverside st.; Lowell Water Works.
Monahan, Patrick R., 39 West Fifth st., teamster.
Monahan, Stephen F., 36 Walnut st., U. S. C. Co.
Monette, Hector, 141 Cumberland rd., teamster.
Mongeau, George E., 444 Fletcher st., merchant.
Moody, Percy H., 173 Stackpole st., clerk.
Moran, John, 40 Alder st., machinist.
Morin, Ovila, 129 White st., dealer.
Morrissey, Frank T., 46 Albion st., dealer.
Mulcahy, M. Wilfred, 109 Rogers st., dealer.
Mulcahey, Thomas E., 665 School st., painter.
Mullaney, John J., 25 Varney st., plumber.
Mullaney, Michael, 4 Litchfield terr., plumber.
Mulno, Harry O., 324 Boylston st., superintendent.
Mullen, Leon H., 33 Bowrne clerk.
Mullen, Joseph, 23 Burtst st., merchant.
Murphy, Frank B., 221 Foster st., insurance and real estate.
Murphy, James A., 86 Hanks st., overseer.
Murphy, Joseph F., 278 High st., printer.
Murphy, Thomas F., 189 Parker st., plumber.
Murphy, Thomas J., 17 Orford st., clerk.
Murphy, William J., 74 Agawam st., dealer.
Murray, Frank, 86 Fourth ave., blacksmith.
Murray, Justin J., 19 Dempsey pl., insurance.
Muzzey, Walter L., 25 Fort Hill ave., salesman.
Myers, James W., 21 Albert st., assistant superintendent.
Myers, John Y., 104 South Whipple st., dealer.

N

Nelson, James, 528 Andover st., supt.
Nestor, Patrick F., 348 Stackpole st., lamplighter.

Nichols, Henry J., 338 Varnum ave., gardener.
Nolan, John H., 117 Coburn st., janitor.
Normanden Charles, 34 Hancock ave., tailor.
Novell, Maurice H., 3-449 Moody st., barber.
Nugent, Michael, 13 L st., operative.

O

Oates, William, 44 Crawford st., machinist.
O'Brien, Daniel J., 90 Park View ave., real estate.
O'Brien, John J., 54 Pleasant st., slater.
O'Brien, Joseph H., 768 Merrimack st., clerk.
O'Brien, William H., 94 Fort Hill ave., chiropodist.
O'Connell, William E., 7 Livermore st., goldsmith.
O'Connell, Richard A., 505 Westford st., dealer.
O'Connor, John J., 298 Riverside st., contractor.
O'Connor, Thomas F., 823 Lawrence st., agent.
O'Dowd, Henry J., 423 High st., carriage dealer.
O'Dwyer, Jeremiah J., 148 Midland st., conductor.
O'Hagan, Michael, 29 Albion st., operative.
O'Hare Frank, 29 Bassett st., bartender.
O'Hare, James, 27 Ellsworth st., teamster.
O'Hare, John P., 27 Abbott st., carpent weaver.
O'Neil, Daniel P., 60 Stromquist ave., manufacturer.
O'Neil, Arthur J., 386 Concord st., clerk.
Osgood, Daniel L., 151 Cabot st., overseer.
O'Shea, Michael, 149 Concord st., machinist.
Osterhout, Fred S., 123 Westford st., commercial traveler.
O'Hearn, Thomas B., 282 Riverside st., contractor.
O'Flahavan, James, 62 Colonial ave., real estate.
Ouellette, Stephen, 780 Merrimack st., operative.

P

Palmer Forrest E., 1 Barton ave., bookkeeper.
Paradis, Peter, 526 School st., barber.
Park, Albert S., 28 Riverside st., driver.
Parker, Percy, 880 Broadway, capitalist.
Parthenais, David A., 30 Phillips st., clerk.
Patten, Henry N., 235 Mammoth rd., bookkeeper.
Patten, William T., 205 Mammoth rd., dealer.
Payette, Adelard, 20 James st., retired.
Payette, Joseph, 31 Gershom ave., tailor.

Payne, John, 181 Stackpole st., dealer.
Pearson, George F., 24 Grace st., clerk.
Peltier, Edmund, 801 Moody st., laborer.
Perham, George L., 53 Lamb st., provisions.
Pascall, Frederick, 58 Carlisle st., machinist.
Perkins, Stewart, 118 Mt. Washington st., barber.
Perley, George E., 79 Florence ave., bank teller.
Perreault, David, 616 Stevens st., jeweler.
Perreault, Arthur C., 552 E. Merrimack st., tanner.
Perreault, George H., 90 Aiken st., salesman.
Perreault, Oscar A., 8-51 Brookings st., clerk.
Perron, Joseph, 470 Moody st., barber.
Person, Nils, 82 London st., carpenter.
Phelps, John L., 1-29 Boynton st., carpenter.
Phornare, Anthony, 35 Burns st., clerk.
Pickering, Samuel A., 59 Hastings st., carpenter.
Pickering, George L., 27 Butterfield st., carpenter.
Pinkham, Arthur S., 27 Harrison st., publicity manager.
Piper, Fred 15 Bellevue st., clerk.
Plaisted, Burton W., 110 Warwick st., clerk.
Plasseu, Paul, 73 Fletcher.
Pollard, Harry G., 96 Mansur st., merchant.
Potter, William H., 251 Gibson st., cigar and tobacco dealer
Power, Warren M., 73 Fletcher st., editor.
Preston, Charles R., 201-203 Appleton st., civil engineer.
Preston, James F., 403 Andover st., treasurer.
Primeau, John, 883 Lakeview ave., motorman.
Prince, Arthur D., 5 Simpson st., merchant.
Proctor, Charles S., 187 Hovey st., paper dealer.
Proctor, Frank D., 248 Foster st., clerk.
Putnam, Addison, 70 Fairmount st., merchant.
Putnam, Alonzo, Jr., 19 Eighth ave., salesman.
Putnam, Frank H., 12 Marlborough st., dealer.
Putnam, Lewis A., 19 Eighth ave., clerk.

Q

Queenan, Eugene C., 48 Varney st., clerk.
Queenan, James J. 5 Harrison st., clerk.
Quigley John M., 62 Inland st., teamster.
Quill, Daniel, 85 Ellis ct., barber.
Quimby, Henry F., 105 Chestnut st., electrician.

Quinn, Felix, Jr., 67 Bartlett st., laborer.
Quinn, Timothy, 93 Bartlett st., foreman.
Quirbach, Henry C., 21 Fairfax ave., cigar maker.

R

Racette, John, 527 Moody st., manufacturer.
Rafferty, Michael T., 15 Auburn st., hack driver.
Ralls, Austin, 58 Willow st., clerk.
Ranlett, Fred M., 445 Merrimack st., dealer.
Rawling, Frank, 627 Chelmsford st., machinist.
Ray, George H., Jr., 17 Oak st., upholsterer.
Ready, John J., 193 East Merrimack, operative.
Ready, William B., 10 Bertha st., barber.
Ready, William E., 67 Walker st., dealer.
Riensterna, Torsten, 43 Sidney st., wool sorter.
Regan, Michael J., 649 School st., motorman.
Regan, ePter J., 95 Pleasant st., Lowell Water Works.
Regan, Denis, 49 Franklin st., checker.
Reidy, Martin H., 101 Riverside st., manager, Lowell Sun.
Reilley, Timothy, 16 Alder st., barber.
Reilly, Peter W., 137 Hovey st., printer.
Reynolds, Michael, 139 Chapel st., expressman.
Ricard, Francois Xavier, 420 Fletcher st., jeweler.
Richards, Charles H., 23 Fort Hill ave., collector.
Richards, John B., 770 Moody st., clerk.
Richards, Lyman H., 170 Crawford st., carpenter.
Richburg, William H., 232 Varnum ave., shoe cutter.
Rigby, William H., 19 Seventh ave., superintendent.
Riley, Charles, 65 Chestnut st., smoke inspector.
Riley, Luke J., 101 Third st., barber.
Riordan, George J., 9 Robert st., water works.
Riordon, Warren P., 21 Orchard st., sealer.
Rivet, Francis L., 484 Moody st., dealer.
Roach, Henry A., 211 Methuen st., retired.
Roach, Patrick Francis, 85 Moore st., bookkeeper.
Roark, James S., 210 Parker st., plumber.
Roark, John J., 210 Parker st., clerk.
Roberts, Arthur L., 73 Jenness st., bookkeeper.
Robertson, William L., 468 Andover st., merchant.
Robertson, John L., 470 Andover st., furniture dealer.

Rogers, John F., 29 Cedar st., undertaker.
Rooney, John J., 238 Pine st., superintendent.
Rooney, James H., 238 Pine st., dentist.
Rountree, Alexander E., 31 Humphrey st., salesman.
Rourke, John, 9 Sixth ave., janitor.
Rosseau, Willie, 14 Spaulding, dealer.
Rousseau, Arthur, 14 Spaulding, carpenter.
Rousseau, Napoleon C., 332 East Merrimack st., clerk.
Roussell, Joseph, 111 Ford st., clerk.
Roux, J. Arthur, 9 White st., contractor.
Rowe, Thomas H., 97 Varney st., clerk.
Rowland, Charles T., 5 Belmont st., wholesale grocer.
Roy, Joseph G., 87 Chestnut st., salesman.
Royal, Garrett G., 198 Cross st., operative
Runels, George H., 240 Gibson st., real estate.
Runels, Ralph E., 4 Harland ave., dealer.
Russell, John L., 17 Victoria st., manager.
Ryan, Albert J., 756 Westford st., real estate.
Ryan, Leonard M., 24 Eighth ave., clerk.
Ryan, Patrick, 48 Birch st., clerk.
Ryan, Patrick J., 1 Goward et., clerk.
Ryan, Thomas S., 42 Sidney st., printer.
Robbins, George L., 284 High st., engineer.
Rousseau, Ferdinand, 691 Merrimack st., machinist.
Ryan, Daniel G., 97 Humphrey st., contractor.

S

Sadlier, George E., 46 Keene st., clerk.
Safford, Arthur T., 266 Andover st., engineer.
Sanderson, George W., 137 Stackpole st., clerk.
Sargent, George A., 49 Andover st., lineman.
Sarre, Leon E., 842 Varnum ave., picture framing.
Saunders, Thomas A., 325 Mammoth rd., agent.
Sayers, John F., 13 Rockdale ave., conductor.
Savard, Aime E., 311 Mammoth rd., baker.
Scannell, William J., 62 Cambridge st., boiler maker.
Scott, George N., 238 Chelmsford st., woodworker.
Scott, William C., 58 East Merrimack st., machinist.
Scott, W. Norman, 732 Stevens st., bookkeeper.
Scribner, George A., 158 Westford st., machinery dealer.
Sealey, Eldridge N., 120 High st., engineer.

Secord, Freeland, 3-49 Wilder st., D. L. Gage Co.
Sheehan, James A., 30 Fort Hill ave., clerk.
Sheahan, Michael J., 46 Agawam st., conductor.
Sheehy, James, 3 Pleasant st., provision clerk.
Shepard, Charles S., 100 Hanks st., steam fitter.
Sherman, Arthur W., 12 Chester st., clerk.
Sherman, Leonard F., 148 Princeton st., shoe manufacturer.
Sherwell, William M., 2 Barton ave., paymaster.
Shields, William H., 79 Hastings st., carpet weaver.
Shore, William T., 45 Blodgett st., Water Dept.
Sicard, Armand V., 720 Moody st., shoemaker.
Sicard, Jean B., 130 Avon st., dealer.
Silcox, Samuel, 19 Robert st., machinist.
Silver, Fred W., 94 So. Loring st., machinist.
Simmons, Ralph A., 128 Westford st., clerk.
Simpson, John A., 67 Methuen st., mason and contractor.
Sinard, Azarie, 28 Howard st., machinist.
Slattery, Charles D., 73 Pleasant st., clerk.
Slattery, Edward F., Jr., 122 Hoyt ave., real estate.
Smith, Charles P., 314 Nesmith st., real estate.
Smith, Chester F., 250 Foster st., travelling man.
Smith, Edward A., 425 Broadway st., machinist.
Smith, Henry A., 42 Mansur st., insurance.
Smith, Henry, 37 Varnum st., barber.
Smith, Omer, 90 Aiken st., janitor.
Smith, Orange V., 812 Stevens st., machinist.
Smith, Thomas M., 198 Holyrood ave., clerk.
Smithson, Angelo L., 5 Myrtle st., overseer.
Somerset, Alfred J., 104 Woodward ave., clerk.
Somerset, James, 104 Woodward ave., janitor.
Southam, Brook, 130 Westford st., overseer.
Stanley, Harry L., 135 Beacon st., coal dealer.
Stanton, John B., 23 Newhall st., wool sorter.
Starr, George S., 144 High st., weaver.
Stearns, Frank K., 122 Eleventh st., laundry.
St. Cyr, Adelard, 110 Bartlett st., fireman.
St. Hilaire, Arthur, 110 Ford st., operative.
St. Hillaire, James, 15 Second ave., mason.
Stowell, Charles H., 99 Fairmount st., manager.
Sturtevant, Augustus L., 32 Brookside st., clerk.
Stafford, William, 787 Moody st., clerk.
Stewart, Arthur A., 53 Mt. Hope st., instructor.

Surprenant, Joseph 537 Moody st., dealer.
Silcox, Albert E., 45 Dunfey st., machinist.
Scannell, Bartholomew, 535 Westford, manufacturer.
Sullivan, Daniel, 99 Andrews st., merchant.
Sullivan, Daniel T., 223 Stackpole st., dealer.
Sullivan, Eugene, 55 Bartlett st., tailor.
Sullivan, George S., 33 Butterfield st., clerk.
Sullivan, Eugene P., 84 Maple st., primer.
Sullivan, John J., Jr., 114 Beech st., agent.
Sullivan, Richard H., 28 Franklin st., teamster.
Sullivan, Thomas, A. D., 28 Grove st., dealer.
Sullivan, W. H., 724 Bridge st., fish dealer.
Sullivan, William J., 17 Bowers st., plumber.
Sykes, Richard, 9 Rockingham st., overseer.

T

Tansey, Eugene A., 322 East Merrimack st., conductor.
Tansey, John F., 322 East Merrimack st., coachman.
Taylor, Samuel A., 12 Chase ave., watchman.
Tellier, Alderic, 236 White st., clerk.
Theriault, Frederick, 259 White st., machinist.
Thissell, Earl A., 47 Mt. Vernon st., retired.
Thomas, Charles R., 725 Stevens st., upholsterer.
Thomas, John, 45 Tolman ave., teamster.
Thomas, Robert R., 24 Loring st., electrician.
Thompson, James A., 68 Grove st., box manufacturer.
Thompson, Samuel H., 121 School st., hardware.
Thorpe, James, 100 Riverside st., treasurer Glass Co.
Tighe, Edward J., 72 Chestnut st., shoe cutter.
Toomey, Eugene F., 170 Lawrence st., clerk.
Toupin, Hercule A., 320 Hildreth st., druggist.
Towle, Ernest C., 25 Fort Hill ave., chauffeur.
Tracy, James H., 147 Concord st., laborer.
Tremblay, Onesime, 17 James st., operative.
Trepanier, J. Edmond, 11 Willie ave., piper.
Trull, George T., 752 Andover st., student.
Trull, William T., 791 Andover st., insurance.
Tryon, Edward R., 182 Riverside st., salesman.
Turcotte, Arthur E., 553 Fletcher st., clerk.
Turcotte, Louis P., 553 Fletcher st., liquor dealer.
Turcotte, Oswald, 33 Ellis ct., baker.
Trottier, William, 60 Hampshire, journalist.

Tuttle, Joseph T., 3 Dane ave., clerk.
Turgeon, Philippe, 50 Chestnut st., machinist.
Twohey, Edward, 14 Madison st., contractor.
Tyler, William H., 30 Epping st., gardener.

V

Vandenberg, William C., 386 Andover st., insurance.
Vigeant, Paul, 48 Riverside st., grain dealer.
Viney, William B., 22 Tyler st., clerk.
Voisard, Hector, 99 White st., clerk.
Vaughan, John H., 14 Leverett st., boiler maker.

W

Wadleigh, Jude C., 305 Andover st., mill agent.
Walker, George H., 153 Winthrop ave., clerk.
Walker, George L., 137 Stackpole st., butcher.
Walker, Hugh G., 18 Pihl st., clerk.
Walker, Roger L., 80 Chestnut st., clerk.
Walker, Thomas C., 80 Chestnut st., druggist.
Walmsley, John, 8 Waterford st., clerk.
Watson, Henry L., 84 Rolfe st., printer.
Watson, Peter, 84 Rolfe st., printer.
Webster, Herbert C., 428 Rogers st., toolmaker.
Weilbrenner, Pierre L. H., 284 Branch st., clerk.
Welch, Andrew, 353 Bridge st., laborer.
Welch, Benjamin F., 160 Shaw st., foreman.
Welch, Richard J., 543 Andover st., plumber.
Welch, John F., 70 Livingston ave., plumber.
Welch, William F., 28 Windsor st., carpenter.
Welch, Martin F., 64 Pleasant st., tanner.
Welch, Frederick F., 30 Riverside st., cabinet maker.
Wentworth, Ansel W., 35 Woodward ave., operative.
Westall, William E., 63 Dover st., merchant.
Weston, Charles F., 32 Colonial ave., belt maker.
Whitcomb, Irving, 282 Appleton st., clerk.
White, James A., 26 Sidney st., agent.
White, John F., 9 Grace st., clerk.
White, William P., 52 Mansur st., U. S. A. retired.
White, William T., 86 Belmont ave., manufacturer of leather.
Whitney, Walter, 219 East Merrimack st., machinist.
Whittet, David W., 34 Wentworth ave., carpenter.

Whittier, Stephen T., 26 Hanks st., paymaster.
Wiggin, Leon M., 656 Wilder st., designer.
Wilde, Thomas E., 1198 Lawrence st., manager.
Wilder, Wesley M., 24 Coral st., hay and grain dealer.
Wilder, William H., 187 Pleasant st., woolen weaver.
Wilder, William F., 20 Huntington st., plumber.
Willman, Clarence T., 36 Chambers st., spinner.
Wilmot, Joseph, 52 Crawford st., teacher.
Wing, Charles H., 577 School st., merchant.
Wilson, Joseph M., 22 Seventh ave., dealer.
Winn, John J., 29 So. Whipple st., mattress maker.
Woodcock, William, 17 Crescent st., second hand.
Wotton, Charles A., 77 Loring st., dealer.
Wyman, Alonzo, 5 James ct., machinist.
Wyman, Stephen T., 185 Stackpole st., city library.

Y

Young, Charles M., 351 Parker st., undertaker.
Young, Charles F., 627 Central st., decorator.

Z

Ziskind, David, 75 Gates st., dealer.

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STEPHEN FLYNN,
Board of Registrars of Voters.





